Continuing Studies & Corporate Education Summer Summer UMASS http://continuinged.uml.edu Summer Session I / May 22-Jun 30 Summer Session II / Jul 10-Aug 17 inside: to make UMass Lowell your summer destination Opportunities to Finish Your Degree Graduate & Undergraduate Courses: 3 Certificate Programs 6 Distance Education 8 Corporate Education Professional Institutes Credit Course Listing
Registration Form
Registration Form
Registration Information Printed by interested in teaching? see our career opportunities listing on page 20

University of Massachusetts Lowell

University of Massachusetts Lowell Continuing Studies and Corporate Education One University Avenue Lowell, MA 01854-2881 (978) 934-2480

The University uses multiple mailing lists. If you receive a duplicate copy, please share it with a friend.

Non-Profit Org. U.S. Postage PAID UMass Lowell

tive reasons

If you are like most of your colleagues, you are probably juggling the demands of career and family responsibilities — and yet you feel that in today's digital economy your need for continuous learning and specific skills sets has never been greater. UMass Lowell can help you meet your career goals.

Convenience and Flexibility

UMass Lowell is one of New England's leaders in distance education, offering 50 online courses that you can take anytime/anywhere. Courses range from "C Programming" to "Introduction to Multimedia" to "General Psychology."

If you are a busy professional whose career requires a lot of travel, our CyberEd program offers you the special convenience you need. This summer, explore our new online AS/BS degrees in Information Technology or our online certificates in Multimedia, UNIX, Information Technology, and Intranet.

The clock hours for busy learners are moving. Our flexible scheduling options provide classes during the day, evenings, and Saturdays, as well as two intensive summer sessions during May–June and July–August.

Call our advising center for an appointment today.

GENERAL REGISTRATION

Monday, May 15, 2000 5:00pm-7:30pm

Find out about:

 Evening Certificate Programs & Degrees

OPEN HOUSE &

- Financial Aid
- Distance Learning Programs

Academic Advisors will be available at UMass Lowell North Campus. For futher information, call 978-934-2480.

Want to learn more about taking courses over the Internet? Are you planning on registering for a CyberEd course this semester? This orientation will introduce you to the features of your online course and answer any questions you may have. Call 978-934-2474.

Join us at the session that best fits your schedule:

Session 1: Monday, May 15, 6:30-7:15pm

Session 2: Monday, May 15, 7:30-8:15pm

2 Opportunities to Finish Your Degree

You've been meaning to do it for a long time. Here's your chance. Whether you finish your degree on-campus or online, UMass Lowell can help you improve and achieve your career goals. No matter where you began your education, or how many times you've relocated, our academic advisors can help you map out a strategy for completing your degree.

Q Unlimited Course Selection

With over 500 courses, including undergraduate and graduate level offerings, UMass Lowell can help you keep abreast of major developments in your field.

UMass Lowell also offers over 30 certificate programs, designed to provide you with a cluster of skill sets in some of the most demanding industries. Signature technology programs in creative media and state-of-the-art programs in manufacturing technology, environmental studies, and information technology can help you stay current.

Quality Programming at an Affordable Price

Affordable courses are taught by senior faculty from UMass Lowell and adjunct faculty who are active practitioners in their respective fields, bringing real-life experience to the classroom.

Award-Winning Programs

UMass Lowell's Division of Continuing Studies and Corporate Education has built a strong 20-year record of offering signature information technology programs to the business world. Continuing Studies' award-winning programs in Multimedia Applications and Data Telecommunications have been recognized by the University Continuing Education Association.

Certificate Programs

TRAINING FOR HIGH DEMAND CAREERS

"A recent survey of mid- and large-size U.S. companies by the Information Technology Association of America (ITAA) concluded there are about 190,000 unfilled information technology jobs in the U.S. today due to a shortage of qualified workers."

Source: America's New Deficit: The Shortage of Information Technology Workers, U.S. Department of Commerce, 1998.

Information **TECHNOLOGY**

Fundamentals of Information Technology (formerly Computer Proficiency Certificate)

The need for professionals with a strong information technology background will continue to increase as business, government, schools, and other organizations seek new applications for computers and networks in the workplace. This certificate is designed as an introductory program for those who want to explore a broad range of electives in different information technology subject areas before deciding on an area of specialization. This program will serve as a gateway to the other, more specialized certificate programs in information technology.

Required Courses:

Introduction to Information Technology Introduction to Personal Computing and 92.202 Microsoft Office*

Electives (Choose 3): **

Programming Electives:

Introduction to Programming with CI 92.211 92.212 Introduction to Programming with CII

92.220 Visual Basic C Programming 92.267 C++ Programming Advanced C++ 92.268 92.269 92.270 Visual C++

Problem Solving with C 92.364 **Database Electives:**

Applications Software: Access 90.342 Relational Database Integration Relational Database Concepts 92.474

Multimedia/Web Electives:

Introduction to Multimedia Exploring the Internet

Additional Electives: Introduction to the UNIX® Operating System

92.312 **UNIX Shell Programming** 90.461 LAN/WAN Technologies

*Students with spreadsheet and database experience on Macs or PCs can replace 92.202 with any of the elective courses listed above.

**Note: This is a partial list of computer elective courses. For the complete list of courses that may be applied as electives to this program, see the Continuing Education Undergraduate Course Catalog for computer math courses with the 90. or 92. prefix, or contact the Advising Center at

Note: Earn the Fundamentals of Information Technology Certificate online. Visit http://cybered.uml.edu for details!

Client/Server Technology

Economic indicators and business surveys predict that there will be a huge gap in information technology skills well into the year 2006. One area where there continues to be a great demand for skilled professionals is in client/server technology.

Many companies have moved to client/server for guick development of flexible applications using a graphical user interface and accessing multiple database management systems. With the current trend towards distributed processing across the enterprise, skilled professionals will be needed to assist companies in transitioning from more traditional processing platforms to client/server platforms.

Required Courses:

90.442 Introduction to Microsoft COM Programming 90.443 Fundamentals of Client/Server Computing Client/Server Networking: Middleware and 90.444

92.220 Visual Basic

Relational Database Concepts 92.474

Electives (Choose 2):

90.445 SQL Database Servers 90.447 Client/Server Programming with Distributed

Objects

90.448 Client/Server Applications and the Internet 90.450 Oracle Architecture and Administration

Advanced Visual Basic 92.224

92.479 Advanced Database Applications: Powerbuilder

The Certificate in UNIX is designed for those currently in the computer industry who want to upgrade their skills, and for those with basic computer literacy who want to enter this growing field. Students learn skills that are immediately applicable in the workplace as well as C programming, the language in which most networking software is written. Many of the courses in this certificate program may be used to satisfy requirements in the Fundamentals of Information Technology and Data/ Telecommunications Certificate Programs, as well as the A.S. or B.S. degrees in Information Systems.

Required Courses:

92.267

C Programming
Introduction to Data Structures 92.360

Introduction to the UNIX Operating System 92.311

92.312 **UNIX Shell Programming**

Electives (Choose 1):

C++ Programming Advanced C++ 92.269 92.313

UNIX Internals Overview UNIX System Interface Programming 92.314 **UNIX System Administration** 92.316 Advanced UNIX Internals/Tuning

Note: You can now earn the UNIX Certificate online. Visit http://cybered.uml.edu for details!

Data/Telecommunications

Networking is a multi-billion dollar industry. The Certificate Program in Data/Telecommunications trains participants for positions as entry-level network administrators, LAN technicians, and system analysts responsible for networking functions in large or small companies. Many of the courses in this certificate program can be applied towards the A.S. or B.S. degrees in Information Systems.

Required Courses:

LAN/WAN Technologies 90.461 TCP/IP and Network Architecture Advanced Networking Technologies 90.462 90 463

90.464 Network Management 92.267 C Programming

Introduction to the UNIX Operating System UMass Lowell and Nortel Networks, Inc. also offer a joint certificate program in Data/Telecommunications.

For more information call (978) 934-2480 or visit our Website at http://www.uml.edu/DCE/Corporate.

Intranet Development

The Certificate Program in Intranet Development provides students with an understanding of the range of skills required to develop a successful intranet. Students are required to complete an intranet survey course, a database design course, and interface design course, as well as core programming courses. In addition, students will select two electives which support an area of focus in intranet development. Students completing the Certificate Program in Intranet Development can qualify for positions as intranet developers, database integration specialists, systems operators, systems administrators, or corporate Web masters.

Required Courses:

90.340 Introduction to the Application and Development of Intranets

Intranet Applications for the Organization Relational Database Concepts 92.474

90.461 LAN/WAN Technologies Electives (Choose 2): 92.267

C Programming 92.268 C++ Programming 90.301 **JAVA Programming** Introduction to Perl 90.305 90.342 Relational Database Integration 90.462 TCP/IP and Network Architecture

90.465 Intranet Network Interface Design 90.490 Intranet Practicum/Internship

Note: Earn the Intranet Development Certificate online. Visit http://cybered.uml.edu for details!

Creative Arts/Media APPLICATIONS

Web Design & Development

In our rapidly evolving knowledge-based economy, workers are struggling to keep up with the latest technologies and skills. Specifically, in the area of Internet technology, local companies are actively pursuing employees with knowledge and skills in Website design and development. Note: Students participating in this program should have basic Mac OS and/or Windows

Required Courses:

Introduction to HTML

Graphics for Multimedia and the World Wide 90.231 Web (formerly Graphics for Multimedia)

Website Development 90.238

(formerly Designing Multimedia for the World

Wide Web)

Website Design Advanced Website Design & Development 70.379 70.384

Electives (Choose 2): 70.262

Digital Imaging & Photography Streaming Media for the Web 70.385 Website Server Administration 90.245

90.246 **Active Server Pages** 90.236

Instructional Design for Interactive Media 90.247 Advanced Web Authoring: Shockwave & Flash!

90.302 **JavaScript**

Website Database Implementation 90.248 90.249

Developing IT Training for the Web E-Commerce on the Web 90.250

Multimedia Applications

The multimedia industry is booming and promises to become one of the most lucrative industries of the century. Individuals with the skills and knowledge to communicate information using the new technology will flourish in this emerging industry. The Multimedia Applications Certificate Program at UMass Lowell is one of the largest, most comprehensive programs of study in multimedia available in New England. It draws upon the expertise of several departments, colleges, and centers within the University, as well as outside expertise from industry professionals.

Required Courses:

90.230 Introduction to Multimedia

Graphics for Multimedia and the World Wide 90.231

90.232 **Desktop Video Production**

Multimedia Authoring Software: Using Macromedia's Director

Designing and Developing Interactive Media 90.234

Electives (Choose 2):

Writing for Interactive Media 42.221 70.262 Digital Imaging and Photography Computer Graphics & Illustration 70.264 Introduction to Graphic Design 70.291 70.376 3D Computer Animation

70.377 Advanced Animation: After Effects

Website Design 70.379 70.384

Advanced Website Design and Development Streaming Media for the VVeb

Instructional Design for Interactive Media 90.236

90.238 Website Development

(formerly Designing Multimedia for the World

Wide Web) 90.239 Multimedia Scripting Using Macromedia

Director's Lingo Advanced Web Authoring: Shockwave and 90.247

90.249 Developing IT Training for the Web

Check Out Our New World Wide Web Site!

Continuing Education information can also be retrieved over the World Wide Web. Look for us at http://continuinged.uml.edu for additional information on current course schedules, course descriptions, degree or certificate program information and much more!



Multimedia Applications Certificate Program On Campus and Online

Introduction to Multimedia

Sloan Foundation seems awarded a multimedia certificate program online:

This Summer, the following multimedia courses will be offered online:

- · Graphics for Multimedia and the World Wide Web
- Website Development
- Multimedia Authoring Software: Using Macromedia Director

Multimedia certificate courses are offered on campus in:

- State-of-the-art multimedia labs
- · Rich and diverse curriculum

For more information on the Multimedia Applications Certificate, see page 3 or call (978) 934-2495.

Interactive Game Design

The interactive game industry is one of many rapidly growing digital design industries. Animation and game design businesses represent a significant percentage of regional startup companies. At the moment, there are very few programs in greater New England that offer training and education in this new growth area. Students completing the Certificate in Interactive Game Design will have the opportunity to build a strong foundation in multimedia technologies and game design. Note: Students participating in this program should have basic Mac OS or Windows proficiency.

Required Courses:

. ioquii ou	- Cai CCCi
90.233	Multimedia Authoring Software: Director
90.236	Instructional Design for Interactive Media
70.262	Digital Imaging & Photography
70.376	3D Computer Animation
70.377	Advanced Animation
70.378	Interactive Game Design
70.381	Advanced Game Design

Electives (Choose 1):

	10110000 1/1
70.496	Practicum Experience/Game Design
90.231	Graphics for Multimedia and the World Wide
	Weh

Graphic Design and Digital

This certificate program offers students interested in breaking into graphic design and electronic publishing an innovative mix of traditional design courses along with several courses in the latest publishing technologies. Courses cover traditional graphic design to digital imaging, computer graphics, designing for multimedia and the World Wide Web, print production, and more. Students in the program complete numerous design portfolio pieces geared towards the professional market.

Required Courses:

/0.291	Introduction to Graphic Design
70.240	Fundamentals of Typography
70.245	Desktop Publishing: Layout and Production
70.262	Digital Imaging and Photography
70.391	Advanced Graphic Design
70.400	Portfolio Production Seminar

Graphic Design and Digital Imaging Certificate

Interested in breaking into graphic design and electronic publishing?

The Certificate Program in Graphic Design and Digital Imaging offers an innovative mix of traditional design courses along with several courses in the latest publishing technologies.

For more information on the Graphic Design and Digital Imaging Certificate, see this page or call (978) 934-2474.

Electives (Choose 3):

	10	
70.264	Computer Graphics & Illustration	

70.376 3D Computer Animation

70.377 Advanced Animation: After Effects

70.379 Website Design

70.384 Advanced Website Design & Development

70.392 Design for Advertising

Introduction to Multimedia 90.230

Graphics for Multimedia and the World Wide 90.231 Web

(formerly Graphics for Multimedia) 90.233 Multimedia Authoring Software: Using

Macromedia's Director 90.238

Website Development (formerly Designing Multimedia for the World

Wide Web)

Technical Writing

The Certificate Program in Technical Writing trains participants to be proficient in desktop publishing, hypertext, software documentation, microcomputer and application software, and programming languages. Taught by practicing professionals, students learn to use the most current technologies and processes. Those with strong writing skills and an aptitude for computers are encouraged to enter the program.

Required Courses:

42.401	Principles of Technical Writing
The state of the s	

Software Writing

Advanced Software Writing 42.403

92.202 Introduction to Personal Computers and Microsoft Office*

Electives (Choose 2):**

Desktop Publishing: Layout and Production 70.245

90.291 Intro to HTML

Writing for Interactive Media

*Note: Students who have previous computer experience may substitute a more advanced computer course for this computer course.

**See Continuing Education Course Catalog for computer courses with a 90. or 92. prefix.

Engineering TECHNOLOGY

Plastics Engineering Technology & **Plastics Engineering Technology** with Packaging Option

The Certificate in Plastics Engineering Technology provides professional training for students needing theoretical and technical information about plastics. Taught by UMass Lowell's staff of international experts, the courses provide students with practical instruction applicable to materials, processing, and design engineering. The program should be of particular benefit to technicians, process engineers, and program development specialists.

Required Courses for Plastics Engineering Technology Certificate:

27.201 Plastics Material Science I (Commodity

Thermoplastics)

27.202 Plastics Material Science II (Engineering

Thermoplastics)

27.217 Plastics Processing Engineering Laboratory 27.373 Plastics Mold Engineering I (Mold Design)

27.401 Processing Technology I

27.402 Processing Technology II

Required Courses for Plastics Engineering Technology Certificate with Packaging Option:

27.201 Plastics Material Science I

27.209 Introduction to Plastics Processing 27.311 Principles of Packaging

Materials and Packages 27.312

27.313 Packaging Development 27.314 Packaging for the Environment

Electives (Choose 3):

27.203 Plastics Material Science III (Thermosetting Resins)

27.301 Additives for Polymeric Materials Reinforced Plastics and Composites 27.303

27.331 Injection Molding

27.376 Plastics Mold Engineering II Physical Properties of Polymers I 27.403

27.404 Physical Properties of Polymers II 27.405 Polymer Characterization

27.406 Polymer Structures/Properties

27.407 Plastics Industry Organization

27.418 Product Design 27.425 Dynamic Mechanical Properties of Plastics I

27,426 Dynamic Mechanical Properties of Plastics II Commercial Development of Plastics

27.451-27.458* Selected Topics I-VIII 23.416* Statistical Quality Control

70.291* Introduction to Graphic Design 70.391* Point of Purchase Design and Packaging

*Recommended for Packaging Option Students

Criminal JUSTICE

Community Policing

In recognition of the current growth and increase of federal funding in Community Policing, UMass Lowell is offering students an opportunity to pursue their interests with the Certificate in Community Policing. This certificate program is designed to provide students with an overall knowledge of Community Policing. The courses in this program can be applied to the B.S. in Criminal Justice,

Required Courses:

44.365 Hate Crimes Community Policing 44.347

44.435 Alternative Dispute Resolution

44.477 Domestic Violence

44.478 Child Maltreatment

44.481 Crime Analysis

48.350 Social Services or 47.209/47.473

Electives (Choose 2):

Oral Communication 42.222

44.261 Juvenile Delinquency

44.335 Juvenile Court: Philosophy and Practice

44.422 Victimology 44.496 Practicum

47.328 Dynamics of Interpersonal Relations

47.361 Problems and Issues in Childhood and Adolescence

48.231 Sociology of the Family

48.255 Social Deviance

Introduction to Management and Organizational 69.253

Environmental STUDIES

Environmental Technology

This certificate program is designed for personnel employed in safety, laboratory, physical plant, distribution, transportation, drafting, public works, or health board functions, as well as consultants. Students in the program gain knowledge relevant to air pollution control, resource recovery, analytical services, hazardous waste management, waste management, water infrastructure, instrument manufacturing, solid waste management, energy sources, asbestos abatement, and water utilities development. Many of the courses in this certificate program can be applied towards the B.S. degree in Civil Engineering Technology: Environmental Option.

Required Courses:

Hazardous Waste Management 15.340

15.378 Air Quality Monitoring

15.420 Solid Waste Management

Environmental Chemistry I OR 86.131

84.121 Chemistry I

Chemistry II OR 84.122

Environmental Chemistry II 86.132

Electives (Choose 2):

15.280 Industrial Waste Treatment

15.356 Water Treatment

Wastewater Treatment 15.358

Pumps and Compressors 15.388

Electrical Basics and Laboratory 17.130 41.367 **Environmental Law**

87.403 GIS in Environmental Studies

OSHA Hazwopper

Hazardous Waste Management

The Certificate Program in Hazardous Waste Management is designed to provide environmental technicians, engineers, managers, and those working in the environmental field with an introduction to regulations and treatment technologies. Course work covers basic environmental chemistry, state and federal environmental regulations, various types of groundwater contamination, and suitable technologies to abate hazardous waste conta-

Required Courses:

Industrial Waste Treatment 15.280

15.340 Hazardous Waste Management

Groundwater Resources 15.396

41.367 **Environmental Law Environmental Chemistry I** 86.131

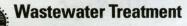
Electives (Choose 3):

15.388 **Pumps and Compressors**

15.420 Solid Waste Management

15.492 Water/Wastewater Plant Management

86.132 **Environmental Chemistry II OSHA** Hazwopper



The Certificate Program in Wastewater Treatment prepares students for all levels of state certification required to manage and operate a modern wastewater treatment facility. The program is designed for individuals seeking to enter the field of wastewater treatment and for those in the field who want to upgrade their skills or achieve a higher level of state certification. Many of the courses in this certificate program can be applied towards the A.S. degree in Civil Engineering Technology: Wastewater Option.

Required Courses:

Wastewater Treatment Plant Operations I 15.261

15.263 Wastewater Operations Lab I

15.280 Industrial Waste Treatment

Wastewater Treatment Plant Operations II 15.361

15.363 Wastewater Treatment Lab II

Electives (Choose 2):

Water Biology

15.388 **Pumps and Compressors**

15.452 Operation and Maintenance of Wastewater

Collection Systems

15.492 Water/Wastewater Plant Management

Environmental Chemistry I 86.131

86.132 **Environmental Chemistry II**



From left to right, Dr. Dirk Messelaar (Director of Continuing Studies), Dr. Jacqueline Moloney (Dean of Continuing Studies), Marnell Haney (Director, HRD, LMI), and Professor Donald Pottle (Chair, Engineering Technology) celebrate UMass and LMI being awarded a Massachusetts Workforce Training grant

The Massachusetts Department of Employment and Training recently awarded UMass Lowell and LMI of Acton, MA a \$70,000 training grant for an on-site Water Treatment Program. LMI is an internationally known manufacturer of electronic metering pumps and accessories which support water treatment and other custom applications. The grant will be used to train 25 LMI assemblers, technicians, customer service representatives, and engineering managers. The one-year training program with six credit courses will allow participants to earn a Certificate in Water Treatment. This customized, on-site program was developed by UMass Lowell professors in consultation with LMI engineers and managers. The program will prepare LMI employees to improve product design and manufacturing processes, to qualify for internal promotions, and to sit for the Massachu-

Water Treatment

The Certificate Program in Water Treatment provides the most effective way to prepare for the water treatment certification exams. Courses in the program are intended to provide students with the technical knowledge to operate and maintain physical/chemical water treatment facilities and water distribution systems. Many of the courses in this certificate program can be applied towards the A.S. degree in Civil Engineering Technology: Water Option.

Required Courses:

Water Supply & Treatment Operations I 15.272

Water Works Operations Lab I 15.274

15.355 Water Distribution Systems

15.372 Water Supply and Treatment Operations II

Environmental Chemistry I 86.131

Electives (Choose 2): Water Biology 15.152

Water Works Operations Lab II 15.374

15.388 **Pumps and Compressors**

15.492 Water/Wastewater Plant Management

86.132 **Environmental Chemistry II**



Additional Certificate Programs

UMass Lowell also offers certificate programs in:

Accounting

 Computer Engineering Technology

 Computer-Assisted Manufacturing

Electro-Optics

Electronics Technology

Land Surveying

 Manufacturing Technology

Nutrition

 Paralegal Studies Quality Assurance

Semiconductor

Manufacturing

Spanish

For more information and a detailed program packet, please call the Office of Continuing Studies and Corporate Education at (978) 934-2480.

Free Professional Development Courses for Mathematics Teachers! A Consortium of District Mathematics Leaders **Building Regional Capacity**

UMass Lowell, the Center for Mathematics Education at EDC, and the Eastern Mathematics Association of Mathematics Department Heads are pleased to offer a National Science Foundation-funded summer program for department heads, curriculum coordinators, and lead teachers. The funding includes tuition, textbooks, and a stipend.

The program will feature advanced disciplinary content, seminars in professional development and leadership, and mentored academic year field experience.

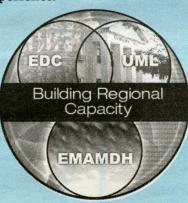
July 17-July 28, 2000

04.536-021 Professional Development

for Mathematics Leaders 92.500-021 **Discrete Structures**

92.520-021 Problem Solving

For more information, contact Alan Doerr at (978) 934-2415 or email: Alan_Doerr@uml.edu.



Continuing Studies and the UML Music Department

Summer Music **Education Program**

June 29-August 11, 2000

For K-12 Music Educators

Summer offerings will include undergraduate and graduate-level courses in:

Multicultural Music Education

• Orff Schulwerk Teacher Training

• Finale: The Art of Music Notation

• Computers in the Music Curriculum

• K-12 Choral Techniques

• Teaching Piano the Suzuki Way

And Others

For schedules, prices, and course descriptions, consult our Website at http://continuinged.uml.edu or contact K. Galaitsis at (978) 934-2446.



Strike a Balance Between Education & Life

Finish Your Degree On-line



Earn an Associate's or Bachelor's Degree in Information Systems Online!

Students enrolled in the CyberEd program can pursue an Associate's or Bachelor's degree in Information Systems.

The online AS/BS degree in Information Systems allows students to earn a degree without having to deal with commuting to campus and trying to balance their busy schedules.

For more information on this program, please email Continuing_Education@uml.edu or call (978) 934-2474. Visit http://cybered.uml.edu for details!



UMass Lowell and Nypro Online Announce the Plastics Technology Certificate Program

An online Plastics Technology certificate program that allows students around the world to earn a credit-bearing certificate via the Internet.

The Plastics Technology Certificate consists of the following online courses:

- Basic Injection Molding
- Introduction to Mold Design
- Statistical Process Control
- Polymeric Materials,
 Design and Applications
- Hydraulics/Pneumatics
- Industrial Maintenance
- Principles of Supervision
- Blueprint Reading
- Robotics, Automation, and Applications
- Process Optimization

Blueprint Reading

For more information, please visit www.nyproonline.com or call (978) 365-9721, extension 684.

CyberEd Home Page

Location: **Description**

Lo

UMass Lowell

ell Main | CyberEd Online Courses | Registration & Advising | Contact U

New! Online Certificate Programs!

If you want to acquire specialized technical skills, but don't have a lot of extra time, consider one of the certificate programs below to help you reach your career goals. Many of the courses taken towards these certificates can also be applied towards the online degree programs.

UMass Lowell offers 4 online certificate programs in:

Multimedia Applications
Fundamentals of Information Technology
Intranet Development
UNIX

For complete information on these certificate programs, please visit the CyberEd Website at **http://cybered.uml.edu.**



Come see how easy it is to take a course online!

UMass Lowell's CyberEd Program brings the classroom to you. By accessing course materials and interacting with faculty and classmates via the Internet and the World Wide Web, you can learn at a time and locale convenient to you!

CyberEd courses offer students many of the same learning experiences that they would have in a traditional classroom, but with added flexibility and convenience. CyberEd classes are limited in size so that professors can provide their students with a high level of personal interaction. For the latest information regarding our online courses and programs, visit the CyberEd Website at http://cybered.uml.edu check out the course listings below, or call (978) 934-2474.

CyberEd courses are \$205.00 per credit.

CyberEd — Quality Education From Our Desktop to Yours - Courses Over the Internet

http://cybered.uml.edu

Course #	Course Title	Prerequisite	Instructor
30.201-021	Community Health		Nicole Champagne
42.101-022	College Writing I	Req. CommonSpace software	Richard Keating
42.102-023	College Writing II	42.101; req. CommonSpace software	Richard Farrell
42.224-022**	Business Writing	Req. CommonSpace software	Nancy Brown
42.226-021**	Technical and Scientific Communication	Req.CommonSpace software; 42.102	Dirk Messelaar
43.308-021	History of Crime and Social Control	Req. CommonSpace software; Area II, HS	Joseph Lipchitz
43.274.021	Native American History	HS	Diane Lewis
47.272-022	Abnormal Psychology	47 101, Area I, BS; req. CommonSpace software	Richard Siegel
47.335-022	Psychology and Women	P: 47.101	Charlene Drake
48.101-022	Introduction to Sociology	Area I, BS	John Ost
49.201-023	Economics I (Microeconomics)	P: 90.111; Area I, BS; req. proctored exams	Michael Carter
58.101-022	Art Appreciation	AE, Area II, Cultural Diversity	Liana Cheney
62.406-021	Purchasing & Materials Management	62.201, BS/BA students & College of Management Dean permission; req. proctored exams	David Lewis
66.301-011	Organizational Behavior (6 weeks)	BS/BA students & College of Management Dean permission; proctored exams	Stuart Freedman
69.253-012	Introduction to Management & Organizational Behavior (6 weeks)	Req. proctored exams	Stuart Freedman
69.281-021	Purchasing Principles	62.201, req. proctored exams	David Lewis
90.160-021	Introduction to Information Systems		Lisa Panagopoulos
90.160-022	Introduction to Information Systems (10 weeks)		Syama Chaudhuri
90.230-022	Introduction to Multimedia/Windows/Mac	Req. HyperStudio software	Rob Graham
90.231-022	Graphics for Multimedia & the WWW (10 weeks)	90.230; req. Photoshop 5.0 or 5.5, scanner	Randy Howe
90.233-021	Multimedia Authoring Software: Using Macromedia's Director/Windows	90.230; req. Macromedia Director 7.02 for Windows	Beatrice Lee
90.238-022	Website Development: Front Page/Windows	Windows proficiency; Photoshop familiarity recommended; req. Microsoft FrontPage 2000	Fred Plaisted
90.291-021	Introduction to HTML	according to the control of the Account of the Control of the Cont	William Dubie
90.291-022	Introduction to HTML		William Dubie
90.301-021	Java Programming/Windows	92.268, Sun Java Dev. Kit	Mark Cohen
90.302-021	JavaScript	91.373 or knowledge of HTML	David Sciuto
90.302-022	JavaScript	91.373 or knowledge of HTML	Gregory Rushton
90.305-021	Introduction to Perl	92.267	Paul Gong
90.341-021	Intranet Applications for the Organization	90.340	Jerry Goguen
90.461-022	LAN/WAN Technologies		Edwin Barnes
90.462-021	TCP/IP & Network Architecture	90.461	Edwin Barnes
91 113-023	Exploring the Internet		Patrick Krolak
92.121-023*	Pre-Calculus Mathematics I	90.111; Area III, MA; req. proctored exams; designed for students who can work independently in math	Alan Doerr
92.183-023	Introduction to Statistics	90.111 or equivalent; Area III, MA	Ann Marie Hurley
92.202-023	Introduction to PCs & MS Office	Requires Microsoft Office 2000	Robin Desmond
92.220-023	Visual Basic	Windows & working knowledge of high-level language; req. Visual Basic 6.0	Randhir Chhatwal
92.220-024	Visual Basic	Windows & working knowledge of high-level language; req. Visual Basic 6.0	Arthur Chadbourne
92.224-021	Advanced Visual Basic	92.220; requires Visual Basic 6.0	Arthur Chadbourne
92.267-024	C Programming	Requires C compiler software; previous programming experience	Timothy Niesen
92.267-025	C Programming	Requires C compiler software; previous programming experience	Ann Marie Hurley
92.268-025	C++ Programming	Requires C++ compiler software; 92.267 or 92.212	Mark Hertel
92.268-026	C++ Programming	Requires C++ compiler software; 92.267 or 92.212	Lance Smith
92.269-021	Advanced C++	Requires C++ compiler software; 92.268	Mark Hertel
92.311-022	Introduction to the UNIX Operating System		Fred Vegliante
92.311-023	Introduction to the UNIX Operating System		Sean McGowan
92.312-022	UNIX Shell Programming	92.311	Michael Richards
92.321-022	Discrete Structures	90.112 or 92.121	Alan Doerr
	Introduction to Data Structures/C	92.267, or 92.212 and 92.364, reg. proctored exams	Victor Gagnon
92.360-021			
92.360-021 92.419-021	Introduction to MATHEMATICA	Two semesters of calculus and one semester of programming; reg. MATHEMATICA software	Kenneth Levasseu

Unless otherwise noted, all courses are 14 weeks.

**Please note that students may not receive credit for both 42.224 and 42.226

CyberEd Course Registration & Confirmation

Students should make sure they have fulfilled the particular course prerequisites prior to registering for the course (see above listing). To register for a UMass Lowell CyberEd course, see the registration form on page 20, or call (978) 934-2700. Be sure to provide your email address when you register!

All students are assigned a user name, password, and the Website address for their course. To obtain this information, each student must complete the Online Registration Confirmation. Two business days after registering for your CyberEd course, visit the CyberEd Website at http://cybered.uml.edu and complete the Online Registration Confirmation. Students who do not receive this information prior to the first week of class should contact the CyberEd staff at (978) 934-2467 or email cybered@uml.edu.

Technical Requirements

Students must provide the following: a personal computer, frames-capable browser (e.g., Netscape Navigator 4.6, Internet Explorer 4.0, or equivalent) a high-speed modem (28.8 KBPS or better), Internet access, and communication, email, and World Wide Web software (some courses may have additional software requirements). Students are responsible for providing their own Internet access.

CyberEd faculty assumes students are competent in the use of Internet tools such as Web browsers, email, chat, ftp, and telnet. Numerous tutorials are available on the Internet at http://cybered.uml.edu/tutorial.

Is This Your First CyberEd Course?

Then come to a free, one-hour, on-campus orientation on CyberEd. Learn how to access your course, contact your instructor, review course lectures, and chat with your classmates. Preregistration is required, see page 2 for details.

For students in the Information Systems program, 92.121 can be substituted for the combination of 90.112 and 90.119.

Plastics Seminars and Workshops

June and August, 2000

Seminars for the plastics industry taught by UMass Lowell's world-class faculty.

For more information, please visit our Website at http://continuinged.uml.edu/plastics or contact the Special Programs office at (978) 934-2446.



STITUT

If you have any questions regarding the ESL Institute courses, please call the Office of Enrollment Services/ Continuing Education at (978) 934-4996 or fax at (978) 934-3087.

See registration dates and procedures on pages 17–18.

Senior Citizen Waivers

Participants who are 60 and older may register for a Community Education course on a "space available" basis without payment of tuition charges. There may be a charge for class materials or texts.

PLEASE NOTE: Courses marked with an asterisk (*) are not available at the reduced tuition rates for senior citizens, state employees, etc.

*English as a Second Language for Beginners

Instructor: John Soucy

This course is for those who are somewhat familiar with the English language. Course includes drillings in the basics of vocabulary, grammar, and usage. Wed: 10 am-12 noon - 10 weeks - Begins May 31 Tuition: \$95

*English as a Second Language for Intermediates, Part A

Instructor: Emile Tabea

Intended to help the student who has already acquired some knowledge of the English language. It is designed to further develop the mechanics of grammar and usage with emphasis on building a larger and more meaningful vocabulary. Low to intermediate level.

Sat: 10 am-12 noon — 10 weeks — Begins May 27 Tuition: \$95

*ESL Advanced, Part A

[00.363-011]

[00.352-011]

Instructor: John Soucy

The five basic foreign language skills (i.e., listening, comprehension, speaking, reading, and writing) will be greatly emphasized. At the same time, a greater knowledge and proficiency in the use of English grammar will be further developed. The different functions of the parts of speech will provide a wide range of experiences in grammatical structures of all kinds.

Thurs: 7-9 pm — 10 weeks — Begins June 1 Tuition: \$95

Basic Composition — ESL

[00.356-011]

Instructor: Lew Gurman The course is designed for ESL students who have difficulties communicating clearly in written English. It provides students with a variety of writing experiences to help them develop a sense of audience, purpose, and style. Students will engage in writing as a process, including brainstorming, free writing, discovering and narrowing topics, developing a paragraph, and revising. Grammatical problems such as sentence fragments, run-on sentences, and subject/verb agreement will be addressed in the context of the writing. Intermediate to advanced level.

Wed: 6:30-9:30 pm — 8 weeks — Begins May 31 Tuition: \$105

*English (American) Pronunciation for Foreign-Born **Speakers**

For those who have a good command of the English language, but need accent reduction assistance. Students are encouraged to bring a tape recorder and blank cassettes to class. Intermediate to advanced level Tuition: \$85

Section A: Sat: 8:00-9:30 am — 10 weeks —

Begins May 27 Course #: [00.354-011]

Instructor: Gailanne Desmond

Section B: Sat: 9:45–11:15 am — 10 weeks —

Begins May 27 Course #: [00.354-012]

Instructor: Gailanne Desmond

Section C: Sat: 9:30-11:00 am — 10 weeks —

Begins May 27 Course #: [00.354-013] Instructor: John Soucy

NEW! ESL Advanced Oral Pronunciation [00.385-011]

Instructor: John Soucy

Course promotes fluent oral communication through the medium of oral presentations. The course will stress grammar, accuracy, and clear English articulation. It should particularly benefit working professionals. Intermediate to advanced level.

Sat: 11:30 am-1:30 pm — 10 weeks — Begins May 27

*English Conversation Practice, Part A [00.370-011]

Instructor: Deborah Barrett

Practice English conversation and improve your oral skills in a relaxed, informal atmosphere. We will work with partners and in small groups doing interviews and discussing interesting topics. Participants should be able to speak in complete sentences. Intermediate level.

Wed: 5:30-7:30 pm - 10 weeks - Begins May 31 Tuition: \$95

Summer Courses at Hanscom Air Force Base — Bedford, Mass

Summer I

90.463-012 **Advanced Networking Technology**

Prereq: 90.462 TCP/IP Tuesday: 5-8 pm, Saturday: 9 am-12 noon Instructor: John Zavgren

92.268-011

Prereq: 92.267 or 92.212 Monday/Wednesday: 5-8 pm Instructor: Ken Santos

90.457-011

Computer Security

Tuesday/Thursday: 5-8 pm Instructor; Richard Smith

Summer II 90.461-023 LAN/WAN

Monday/Wednesday: 5–8 pm Instructor: David Bukourwicz

90.291-021 Intro to HTML

NEW Tuesday: 5-8 pm, Saturday: 9 am-12 noon Instructor: Justin Seiferth

90.458-021 **Advanced Topics in Computer Security**

Tuesday/Thursday: 5-8 pm Instructor: Richard Smith

To register for any of these courses, please call (978) 934-2700. Note: Off-campus rates apply.

Begin your graduate education...

[00.350-011]

Graduate School

University of Massachusetts Lowell

86 areas of graduate study

12 Doctoral Programs • 28 Master's Degree Programs • 25 Graduate Certificate Programs

Many program options and focused concentrations available.

- Global recognition from the United Nations, NASA, and U.S. News & World Report
- Internationally known research faculty teach graduate courses
- Graduate degrees provide a distinct advantage in the job market
- Try one course before formally applying

Access Graduate School information and application forms at

www.uml.edu/grad

Off-Campus Courses

Selected graduate courses offered at corporate and community sites in the region.

Please call for updated information:

1-800-656-GRAD

or access the Web at

www.uml.edu/grad/off_campus.html

Quality Graduate Education — Affordable Cost

Atmospheric Sciences

Biology

Biochemistry

Biotechnology Chemistry

Chemical Engineering

Civil Engineering

Clinical Lab Sciences Computer Science

Criminal Justice Economic & Social

Development of Regions

Education

Electrical & Computer Engineering

Energy Engineering Environmental Studies

Health Services Administration

Mechanical Engineering

Mathematics

MBA

Management Science in Manufacturing

Music

Nursing

Physical Therapy

Physics Plastics Engineering

Polymer Science

Psychology Radiological Science

Work Environment

...and advance your career HERE.

REMINDER: THIS COURSE LISTING COMBINES THE UNIVERSITY OF MASSACHUSETTS LOWELL DAY SCHOOL COURSES AND THE CONTINUING STUDIES COURSES. IT IS IMPORTANT TO CHECK COURSE NUMBERS AND PREREQUISITES TO ENSURE ENROLLMENT IN THE CORRECT CLASS.

Summer Session I May 22-June 30, 2000

Day Classes begin on May 22 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.

M/W Evening Classes begin on May 22 and include 3 FRIDAYS: June 2, June 16, and June 30 at the regularly scheduled hours.

T/Th Evening Classes begin on May 23 and include 2 FRIDAYS: June 9 and June 23 at the regularly scheduled hours.

rin el colon	(1) - 45-7	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
eccounting		60.201-011 60.202-011 60.331-011	Accounting/Financial Accounting/Managerial Cost Management Systems	T/Th M/W M/W	6:30-9:30 pm 9:00 am-Noon 6:00-9:00 pm	3 3 3	P: 60.201 or 67.102 P: 60.202, BSBA (non-Acct. majors)	Charles Thompson Harry Sauter Paul Brown
		may not trans	Federal Income Taxes es with the 67 prefix are not intended for st fer into the BSBA program. IN ACCOUNTING	T/Th udents ma	7:00-10:00 pm atriculating in the Ba	3 chelor of	and Coll. of Mgmt. Dean permission P: 67.102 or 60.201 Science degree programs in the College	Tiffany Lane of Management and
rt/Computer			rmation Technology for additional Multimed	dia and We			ngs.)	Alara Ciratt Cara
iraphics		70.291-021 70.255-011 70.262-021	Intro. to Graphic Design/Mac (14 weeks) Drawing: Form & Space Digital Imaging & Photography/Windows (14 weeks)	M-Th	6:30-9:30 pm 9:30 am-Noon 9:00 am-Noon	3 3 3	P: Mac or Windows proficiency P: Mac or Windows proficiency	Alene Sirott-Cope Department Faculty Ella Carlson
		70.265-011 70.384-021	Computer Art I Advanced Website Design & Development/Windows (14 weeks)	M-Th Mon	9:30 am-Noon 7:00-10:00 pm	3	P: 70.255 or instructor permission P: 70.379, 90.238	Department Faculty Alexandra Fisher
		70.400-021	Portfolio Production Seminar (14 weeks)	Wed	7:00-10:00 pm	3	P: 70.291, 70.240, 70.245, and 70.391 or permission of instructor	Anne Katzeff
		for transfer up CERTIFICATE CERTIFICATE	ove courses will not directly transfer into the con prior dept. approval. IN GRAPHIC DESIGN AND DIGITAL IMAG IN WEBSITE DESIGN AND DEVELOPMEN IN INTERACTIVE GAME DESIGN (See pag	ING (See pa	page 4 for required ge 3 for required co	courses.)	degree program, certain two-course clus	ters may be accepte
art History		58.101-022 58.101-011 58.204-011 58.494-011	Art Appreciation (14 weeks) Art Appreciation Survey of Art II Directed Studies	CyberEd/ M/W M-Th TBA	Online Course 7:00-10:00 pm 9:45-11:45 am TBA	3 3 3 3	AE, Area II/Cultural Diversity AE, Area II/Cultural Diversity AE, HS, Area II/Cultural Diversity AE, Area II	Liana Cheney Charles Giuliano Laura Voight Liana Cheney
iological ciences	25.60	35.211-011 35.213-011	Basic Clinical Microbiology & Pathology Basic Clinical Micro. & Pathology Lab	M-Th M/T/W	9:45-11:45 am Noon-3:00 pm	3 1 (3)	P: 35.102, 35.104; C: 35.213; SL P: 35.102, 35.104; C: 35.211; SL	Jacob Lam Jacob Lam
Abject souther		81.327-011 81.329-011	Histology Histology Lab	M-Th M/Th	7:30-9:30 am 2:15-5:15 pm	3 1 (3)	C: 81.329 C: 81.327	Ezequiel Rivera Ezequiel Rivera
		83.101-011 83.101-012 83.103-011	Life Science I Life Science I Lab	M-Th T/Th T/Th	Noon-2:00 pm 7:00-10:00 pm 2:15-4:15 pm	3 1 (2)	C: 83.103; Area III, SL C: 83.103; Area III, SL C: 83.101; Area III, SL	Siu-Lam Lee Karen McInnis-Marc Siu-Lam Lee
hemical and luclear ngineering		10.347-011	Elements of Thermodynamics and Heat Transfer	M-Th	7:30-9:30 am	3	P: 92.132, 95.141	Department Faculty
hemistry		84.111-011 84.113-011	General Chemistry I General Chemistry Lab I	M-Th M/W/Th	Noon-2:00 pm 2:15-5:15 pm	3 1 (3)	SL C: 84.111; SL	Judith Goldsberry Paul Damour
		84.121-011	Chemistry I	M/W	7:00-10:00 pm	3	P: Science, Eng. & Eng. Tech. majors only; others with dept. permission; C: 84.123; SL	Gregory Slack
		84.122-011	Chemistry II	T/Th	7:00-10:00 pm	3	P: 84.121; Eng. & Eng. Tech. majors; others with department	Judith Goldsberry
		84.123-011 84.124-011	Chemistry Lab I Chemistry Lab II	T/Th M/W	7:00-10:00 pm 7:00-10:00 pm	1 (3) 1 (3)	permission; C: 84.124; SL C: 84.121; SL P: 84.123; C: 84.122; SL	Paul Damour John Sarabia
		84.221-011 84.229-011	Organic Chemistry I Organic Chemistry Lab I	M-Th M/W/Th	Noon-2:00 pm 2:15-6:15 pm	3 1 (4)	P: 84.122, 84.124; C: 84.229; SL C: 84.221; SL	Gene Davis James Foley
		86.223-011 86.225-011	Principles of Organic Chemistry I Principles of Organic Chemistry Lab I	T/Th M/W	7:00-10:00 pm 6:00-10:00 pm	3 1 (4)	P: 84.122, 84.124; C: 86.225; SL C: 86.223; SL	Gene Davis Judith Freeman
inema		52.335-011 52.378-011	Cinema and Italian Americans Italian Cinema and Culture	M-Th M-Th	9:45-11:45 am Noon-2:00 pm	3 3	Area II, HV, AE Area II, HV, AE	Mario Aste Mario Aste
civil Ingineering echnology		15.113-011 CERTIFICATE	CAD IN ENVIRONMENTAL TECHNOLOGY (Sec. IN LAND SURVEYING	T/Th	7:00-10:00 pm	2 (3)	P: 23.101	Department Faculty
Civil Ingineering Technology: Vater/ Vastewater Option		CERTIFICATE	IN HAZARDOUS WASTE MANAGEMENT IN WATER TREATMENT (See page 5 for re IN WASTEWATER TREATMENT (See page	equired co	urses.)	ses.)		
lient/Server echnology		(See courses CERTIFICATE	listed under Information Technology.) EIN CLIENT/SERVER TECHNOLOGY (See page 2)	page 3 for	required courses.)		agotament is grangesee . If the said and address of the said and a	
omputer Nathematics			listed under Information Technology.)	•				
omputer			n-tech and specialized courses are \$185 per	credit; all	CyberEd and off-car		rses are \$205 per credit.	D I.V. I.I.
Science see also Technology)		91.113-023 91.305-021 91.404-021	Exploring the Internet (14 weeks) Computer Architecture (14 weeks) Analysis of Algorithms (14 weeks)	Th T	/Online Course 5:00-8:00 pm 5:30-8:30 pm	3 3 3	P: 91.203, 91.102 P: 91.204, 92.322	Patrick Krolak David Hendrickson Urska Cvek
Criminal Justice		44.141-011 44.352-011	Police Process Community-Based Corrections	M/W M/W	6:00-9:00 pm 7:00-10:00 pm	3	10 mg	Richard Stanley Steven Sacco
see also Paralegal		44.373-011 44.380-011	Issues in Policing Selected Issues: Stress Management	M/W T/Th	6:00-9:00 pm 6:00-9:00 pm	3		Douglas Morrow Gerald Tully
tudies)		44.494-011 44.495-011	Criminal Justice Internship Criminal Justice Field Studies	TBA TBA	TBA TBA	12	C: 44.495; Chair permission C: 44.494; Chair permission	Allan Roscoe Allan Roscoe
		44.496-011	Criminal Justice Practicum	TBA	TBA	3	P: Instructor permission	Allan Roscoe

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Economics	49.201-011 49.201-012 49.201-013 49.201-023	Economics I (Microeconomics) Economics I (Microeconomics) Economics I (Microeconomics) Economics I (Microeconomics) (14 weeks)	M-Th M/W T/Th CyberEd	9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm d/Online Course	3 3 3 3	P: 90.111; Area I, BS P: 90.111; Area I, BS P: 90.111; Area I, BS P: 90.111; Area I, BS; requires	George Dery Harjeet Khosla Rudolph Matty Michael Carter
	49.202-011 49.211-011	Economics II (Macroeconomics) Statistics I	T/Th M-Th	7:00-10:00 pm 9:45-11:45 am	3	proctored exams Area I, BS P: 92.122 or equivalent	Patricia Machado Paul Snoonian
Electrical and Computer Engineering	16.311-011 16.311-012 16.364-011 16.409-011 16.470-011 16.491-011 16.492-011 16.493-011	Electronics I Lab Electronics I Lab Engineering Mathematics Directed Studies VLSI Fabrication (T/Th Labs) Industrial Experience Industrial Experience Industrial Experience	M/W M/W T/Th TBA W/F TBA TBA	4:00-7:00 pm 7:00-10:00 pm 6:00-9:00 pm TBA 9:00 am-Noon TBA TBA TBA	2 (3) 2 (3) 3 3 3 3 3 3	P: 16.202; C: 16.365 P: 16.202; 16.365 P: 92.234, 16.201 P: Department faculty permission P: 16.365 P: Permission by Alan Rux P: Permission by Alan Rux P: Permission by Alan Rux	Alan Rux Alan Rux A. J. Noushin Ziyad Salameh Kanti Prasad Alan Rux Alan Rux Alan Rux
Electronic Engineering	17.130-011 17.213-011	Electrical Basics and Laboratory Electric Circuits	T/Th M/W	7:00-10:00 pm 7:00-10:00 pm	2 (3)	P: 42.226, 92.267, 99.132 P: 92.125 (may be taken	Department Faculty James Davis
Technology	CERTIFICATE	IN ELECTRONICS TECHNOLOGY IN ELECTRO-OPTICS IN SEMICONDUCTOR MANUFACTURING		er et elektroe vot da		concurrently 92.267	
English	*Please note th	College Writing I College Writing I College Writing I (14 weeks) College Writing II College Writing II College Writing II (14 weeks) College Writing II (14 weeks) College Writing I for International Students The Short Story Horror Story Business Writing (14 weeks) Technical and Scientific Communication Technical and Scientific Communication (14 weeks) Turning Fiction into Film Introduction to Shakespeare Crime in Literature History of American Literature I Creative Writing: Fiction Creative Writing: Poetry Advanced Software Writing (14 weeks) hat students may not receive credit for both IN TECHNICAL WRITING (See page 4 for receive writing (15 weeks)	Mi-Th T/Th CyberEd T/Th T/Th M-Th CyberEd M/W M-Th M-Th M-Th M-Th M/W M-Th M-Th T/Th	7:30-9:30 am 7:00-10:00 pm d/Online Course 9:45-11:45 am 7:00-10:00 pm d/Online Course 7:00-10:00 pm 7:00-10:00 pm Noon-2:00 pm d/Online Course 6:30-9:30 pm d/Online Course 7:00-10:00 pm 9:45-11:45 am 7:30-9:30 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm	333333333333333333333333333333333333333	Requires CommonSpace software P: 42.101 P: 42.101 Requires CommonSpace software P: 42.102; Area II, LT P: 42.102; Area II, LT Requires CommonSpace software P: 42.102 P: 42.102; requires CommonSpace software P: 42.102 P: 42.102; Area II, LT P: 42.102; Area II, LT P: 42.102; LT, Area II P: 42.102 P: 42.102 P: 42.102 P: 42.102 P: 42.102	William Coughlin Department Faculty Richard Keating William Coughlin Anthony Szczesiul Richard Farrell Paul Francoeur Deborah Woelfllein Lucilia Valerio Nancy Brown Peter Payack Dirk Messelaar Anthony Szczesiul William Hersey William Hersey Upepartment Faculty Jay Atkinson Jennifer Militello David Locke
Graphic Design and Digital Imaging	(See courses	listed under Art and Information Technolog IN GRAPHIC DESIGN AND DIGITAL IMAG	y.)	TO MATERIAL TO GLOS	d courses.)	Second Annual Color Colo	
Health Professions	30.201-021 30.201-011 30.306-011 30.315-011	Community Health (14 weeks) Community Health Introduction to Gerontology Kinesiology and Lab	CyberEd M-Th M-Th M-F	d/Online Course 9:45-11:45 am Noon-2:00 pm 9:45-11:45 am	3 3 3 4	BS P: All freshmen, soph. E.P. courses	Nicole Champagne Nicole Champagne Judith Antonangeli Joseph Dorsey
	35.101-011 35.103-011 35.206-011 35.211-011 35.213-011 36.350-011 35.356-011 CERTIFICATE	Human Anatomy and Physiology I Human Anatomy and Physiology I Lab Human Nutrition Basic Clinical Microbiology and Path. Basic Clinical Micro. & Path. Lab Human Biochemistry Pharmacology IN NUTRITION	M-Th T/W/Th T/Th M-Th M/T/W M/T M-Th	9:45-11:45 am 1:00-4:00 pm 6:00-9:00 pm 9:45-11:45 am Noon-3:00 pm 7:00-10:00 pm 7:30-9:30 am	3 1 (3) 3 3 1 (3) 3 3	& 1 yr. of A. P. & 1 yr. of Physics C: 35.103; SL C: 35.101; SL P: 35.102, 35.104; C: 35.213; SL P: 35.102, 35.104; C: 35.211; SL P: 35.252 or equivalent P: Junior level	Sujana Reddy Alease Bruce Paul Fierimonte Jacob Lam Jacob Lam Thomas Wilson Arthur Vergados
History (see also Art History)	43.105-011 43.112-011 43.274-021 43.308-021 43.365-011	Western Civilization I U.S. Since 1877 Native American History (14 weeks) History of Crime and Social Control (14 weeks) U.S. Since 1960		7:30-9:30 am Noon-2:00 pm d/Online Course d/Online Course 7:00-10:00 pm	3 3 3 3	Area II, HS Area II, HS HS Requires CommonSpace software; Area II, HS Area II, HS	Joseph Lipchitz Dean Bergeron Diane Lewis Joseph Lipchitz Stephen Russell
Information Technology	90.160-021	Introduction to Information Systems (14 weeks)		d/Online Course	3	7,1104 11,110	Lisa Panagopoulos
(including Multimedia and Computer Graphics)	90.160-022 90.171-011 90.230-011 90.230-012 90.230-022	Introduction to Information Systems (10 weeks) Applications Software: Access Intro. to Multimedia/Windows Intro. to Multimedia/Windows Intro. to Multimedia/Windows/Mac	T/Th M/W T/Th	6:00-9:00 pm 7:00-10:00 pm 7:00-10:00 pm d/Online Course	3 3 3 3	P: 92.202 or equivalent Requires Hyperstudio software	Syami Chaudhuri Richard Abers Chris Perry Randy Howe Rob Graham
Please Note: All information technology/ high-tech and	90.231-011	(14 weeks) Graphics for Multimedia and the World Wide Web/Windows Graphics for Multimedia and the	T/Th	7:00-10:00 pm	3	P: 90.230 P: 90.230; requires Photoshop 5.0 or	Marina Javis Randy Howe
specialized courses are \$185 per credit; All CyberEd and off-campus courses are	90.233-021 90.234-021 90.238-011	World Wide Web (14 weeks) Multimedia Authoring Software Using Macromedia's Director/Windows (14 wee Designing & Developing Interactive Media/Mac (14 weeks) Web Development: FrontPage/Windows	eks) Tues	7:00-10:00 pm	3 3 3	5.5 and access to a scanner P: 90.230; requires Macromedia Director 7.02 for Windows P: 90.230, 90.231, 90.232, 90.233 or instructor permission P: Windows proficiency;	Beatrice Lee Walter Wright Fred Plaisted
\$205 per credit.	90.238-021 90.238-022	Web Development: FrontPage/Windows (14 weeks) Web Development: FrontPage/Windows (14 weeks)	Thurs	7:00-10:00 pm	3	Photoshop familiarity recommended P: Windows proficiency; Photoshop familiarity recommended P: Windows proficiency; Photoshop familiarity recommended; req. FrontPage 2000	Judy Feeney Fred Plaisted
	90.247-021 90.291-011 90.291-021	Advanced Web Authoring: Shockwave & Flash/Windows (14 weeks) Intro. to HTML Intro. to HTML	Tues T/Th CyberEc	7:00-10:00 pm 7:00-10:00 pm d/Online Course	3 3 3	P: 90.233	Beatrice Lee David Sciuto William Dubie
	90.291-022	(14 weeks) Intro. to HTML (14 weeks)		d/Online Course	3		William Dubie
	90.301-011 90.301-012 90.301-021	Java Programming/Windows Java Programming/Windows Java Programming/Windows (14 weeks)	T/Th M/W CyberEd	7:00-10:00 pm 7:00-10:00 pm d/Online Course	3 3 3	P: 92.268 P: 92.268 P: 92.268; requires Sun Java Development Kit	Marjan Trutschl Jorge Medina Mark Cohen
	90.302-021	JavaScript (14 weeks)	CyberE	d/Online Course	3	P: 91.373 or knowledge of HTML	David Sciuto

90.305-021 Introduction to Perl (14 weeks) 90.341-021 Introduction to Perl (14 weeks) 90.450-011 Government Applications for the Organization CyberEd/Online Course 3 P. 90.440 Jerry (14 weeks) 90.457-011 Government Applications for the Organization CyberEd/Online Course 3 P. 92.474 Michan	Goguen ael Cummings ard Smith Wu n Barnes artment Faculty
90.450-011 Oracle Architecture & Administration MW 7:00-10:00 3 P: 92.474 Micha 90.457-011 Computer Security (Held at Hanscom Air Force Base, Bedford) 90.461-011 LAN/WAN Technologies MW 7:00-10:00 pm 3 P: 90.461 Edwin 90.462-011 TCP/IP and Network Architecture MW 7:00-10:00 pm 3 P: 90.461 Edwin 90.462-011 TCP/IP and Network Architecture CyberEd/Online Course 3 P: 90.461 Edwin 90.463-011 Advanced Networking Technology T/Th 7:00-10:00 pm 3 P: 90.462 Alan W 90.463-012 Advanced Networking Technology T/Th 7:00-10:00 pm 3 P: 90.462 Alan W 90.463-012 Advanced Networking Technology T/Sat Pieze Michael Micha	wrd Smith Wu n Barnes urtment Faculty
Main	n Barnes ertment Faculty
90.462-021 TCP/IP and Network Architecture	rtment Faculty
14 weeks	- Darnes
90.463-012 Advanced Networking Technology T/Sat 3 P. 90.462 John Z	
90.464-011 Network Management M/W 7:00-10:00 pm 3 P: 90.463 Jaime 92.202-012 Introduction to PCs and MS Office M/W 6:00-9:00 pm 3 P: 92.202-013 Introduction to PCs and MS Office M/W 6:00-9:00 pm 3 Adrian John (92.202-023 Intro. to PCs and MS Office T/Th 6:00-9:00 pm 3 P: 92.210 Adrian John (92.202-023 Intro. to PCs and MS Office T/Th 6:00-9:00 pm 3 P: 92.211 Or equivalent James 92.211-011 Intro. to Programming with C M/W 7:00-10:00 pm 3 P: 92.212 or equivalent James 92.212-011 Intro. to Programming with C M/W 7:00-10:00 pm 3 P: 92.211 Or equivalent James P: 92.212 Or equivalent James P: 92.210 Or equivalent James Jam	vvu Zavgren
92.202-012	e Fernandez
92.202-013 Introduction to PCs and MS Office T/Th 6:00-9:00 pm 3 Requires Microsoft Office 2000 Robin 92.202-023 Intro. to PCs and MS Office (14 weeks) CyberEd/Online Course 3 Requires Microsoft Office 2000 Robin 92.211-011* Intro. to Programming with C T/Th 7:00-10:00 pm 3 P: 92.121 or equivalent Christ 92.211-011* Intro. to Programming with C T/Th 7:00-10:00 pm 3 P: 92.121 or equivalent Christ 92.212-011 Intro. to Programming with C T/Th 7:00-10:00 pm 3 P: 92.121 or equivalent Christ 92.212-012 Intro. to Programming with C T/Th 7:00-10:00 pm 3 P: 92.121 Or equivalent Christ 92.212-012 Intro. to Programming with C T/Th 7:00-10:00 pm 3 P: 92.211 James Vindows & working knowledge Arthur of a high-level language; req. Visual Basic (14 weeks) CyberEd/Online Course Visual Basic 6.0 Vindows & working knowledge Arthur of a high-level language; requires Visual Basic 6.0 P: 92.220; requires Visual Basic 6.0 P: 92.220; requires Visual Basic 6.0 P: 92.220; requires Visual Basic 6.0 P: 92.220; requires Visual Basic 6.0 P: 92.220; requires Visual Basic 6.0 P: previous programming exp. Edwar 92.267-012* C Programming M/W 7:00-10:00 pm 3 P: previous programming exp. Edwar 92.267-012* C Programming T/Th 6:00-9:00 pm 3 P: previous programming exp. Timoth 92.267-024* C Programming T/Th 7:00-10:00 pm 3 P: previous programming exp. Timoth P: previous programming P: previous	Bass nna Morris
Pack	Corliss n Desmond
92.212-011 Intro, to Programming with C II M/W 7:00-10:00 pm 3 P: 92.211 Lisa P James	es Brzowski
92.220-024 Visual Basic (14 weeks) 92.220-023 Visual Basic (14 weeks) 92.224-021 Advanced Visual Basic (14 weeks) 92.267-011* C Programming 92.267-011* C Programming 92.267-012* C Programming 92.267-014* C Programming 92.267-014* C Programming 92.267-014* C Programming 92.267-015* C Programming 92.267-016* C Programming 92.267-017* C Programming 93.267-018* C Programming 94.267-018* C Programming 95.267-019* C Programming 96.267-019* C Programming 97.77h 700-10:00 pm 97.77h 700-10:00 pm 97.77h 700-10:00 pm 97.77h 700-10:00 pm 97.77h 97	topher Geggis Panagopoulos
Visual Basic 6.0 92.224-021 Advanced Visual Basic (14 weeks) CyberEd/Online Course 3 P: 92.220; requires Visual Basic 6.0 92.224-021 Advanced Visual Basic (14 weeks) CyberEd/Online Course 3 P: 92.220; requires Visual Basic 6.0 Arthur 92.267-011* C Programming M/W 6:00-9:00 pm 3 P: previous programming exp. Edwar 92.267-012* C Programming T/Th 6:00-9:00 pm 3 P: previous programming exp. Lee Cl 92.267-014* C Programming T/Th 6:00-9:00 pm 3 P: previous programming exp. Nancy 92.267-014* C Programming T/Th 7:00-10:00 pm 3 P: previous programming exp. Nancy 92.267-024* C Programming (14 weeks) CyberEd/Online Course 3 P: previous programming exp. Timoth requires C compiler software 92.268-011 C++ Programming M/W 5:00-8:00 pm 3 P: 92.267 or 92.212 Nenne 92.268-023 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Depar 92.268-024 C++ Programming (14 weeks) T 7:00-10:00 pm 3 P: 92.267 or 92.212 Thome 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 P: 92.267 or 92.212; requires Mark I C++ compiler software Mark I C++ compiler software Nark I C++ compiler software	es Brzowski ur Chadbourne
92.220-023 Visual Basic (14 weeks) 92.224-021 Advanced Visual Basic (14 weeks) 92.267-011* C Programming 92.267-012* C Programming 92.267-013* C Programming 92.267-014* C Programming 92.267-014* C Programming 92.267-015* C Programming 92.267-016* C Programming 92.267-017 C Programming 92.267-018* C Programming 92.267-019* C Programming 92.267-024* C Programming (14 weeks) 92.267-024* C Programming (14 weeks) 92.267-025* C Programming (14 weeks) 92.268-011 C++ Programming 92.268-023 C++ Programming (14 weeks) 92.268-024 C++ Programming (14 weeks) 92.268-025 C++ Programming (14 weeks) 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 Windows & working knowledge of a high-level language; requires Visual Basic 6.0 Arthur 92.220; requires Visual Basic 6.0 Arthur 92.267-019* P: previous programming exp. Lee Cl Nancy 92.267-019* P: previous programming exp. Timoth requires C compiler software 92.268-025 C++ Programming (14 weeks) 92.267 or 92.212 Pepar 92.267 or 92.212 Pepar 92.267 or 92.212 Pepar 92.267 or 92.212 Pepar 92.267 or 92.212; requires CyberEd/Online Course P: 92.267 or 92.212 Pepar 92.267 or 92.212; requires C++ compiler software CyberEd/Online Course Amak I	
92.224-021 Advanced Visual Basic (14 weeks) CyberEd/Online Course 92.267-011* C Programming M/W 6:00-9:00 pm 3 P: previous programming exp. Edwar 92.267-012* C Programming M/W 7:00-10:00 pm 3 P: previous programming exp. Lee Cl 92.267-013* C Programming T/Th 6:00-9:00 pm 3 P: previous programming exp. Nancy 92.267-014* C Programming T/Th 7:00-10:00 pm 3 P: previous programming exp. Nancy 92.267-024* C Programming (14 weeks) CyberEd/Online Course 92.267-024* C Programming (14 weeks) CyberEd/Online Course 92.267-025* C Programming (14 weeks) CyberEd/Online Course 92.268-011 C++ Programming M/W 5:00-8:00 pm 3 P: previous programming exp.; Ann M requires C compiler software 92.268-023 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Kenne 92.268-024 C++ Programming (14 weeks) T 7:00-10:00 pm 3 P: 92.267 or 92.212 Depar 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course C++ compiler software	lhir Chhatwal
92.267-012* C Programming M/W 7:00-10:00 pm 3 P: previous programming exp. Lee Cl 92.267-013* C Programming T/Th 6:00-9:00 pm 3 P: previous programming exp. Nancy 92.267-014* C Programming T/Th 7:00-10:00 pm 3 P: previous programming exp. Timoth 7:00-10:00 pm 3 P: previous prog	ur Chadbourne ard D'Entremont
92.267-014* C Programming T/Th 7:00-10:00 pm 3 P: previous programming exp. Timoth 92.267-024* C Programming (14 weeks) CyberEd/Online Course 3 P: previous programming exp.; Timoth requires C compiler software 92.267-025* C Programming (14 weeks) CyberEd/Online Course 3 P: previous programming exp.; Ann M requires C compiler software 92.268-011 C++ Programming M/W 5:00-8:00 pm 3 P: 92.267 or 92.212 Kenne (Held at Hanscom Air Force Base, Bedford) 92.268-023 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Depart 92.268-024 C++ Programming (14 weeks) T 7:00-10:00 pm 3 P: 92.267 or 92.212 Thomas 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 P: 92.267 or 92.212; requires Mark I C++ compiler software	Clark
92.267-024* C Programming (14 weeks) 92.267-025* C Programming (14 weeks) 92.268-011 C++ Programming (Held at Hanscom Air Force Base, Bedford) 92.268-023 C++ Programming (14 weeks) 92.268-024 C++ Programming (14 weeks) 92.268-025 C++ Programming (14 weeks) 92.268-026 C++ Programming (14 weeks) 92.268-027 C++ Programming (14 weeks) 92.268-027 C++ Programming (14 weeks) 92.268-028 C++ Programming (14 weeks) 92.268-029 C++ Programming (14 weeks) 92.268-025 C++ Programming (14 weeks) 92.268-025 C++ Programming (14 weeks) 92.268-026 C++ Programming (14 weeks) 92.268-027 C++ Programming (14 weeks) 92.268-027 C++ Programming (14 weeks) 92.268-028 C++ Programming (14 weeks) 92.268-029 C++ Programming (thy Niesen
92.267-025* C Programming (14 weeks) 92.268-011 C++ Programming M/W 5:00-8:00 pm 3 P: previous programming exp.; Ann M requires C compiler software 92.268-023 C++ Programming (14 weeks) 92.268-024 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Depart 92.268-024 P: 92.267 or 92.212 Depart 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 7:00-10:00 pm 3 P: 92.267 or 92.212 Thomatical Programming (14 weeks) CyberEd/Online Course 7: 92.267 or 92.212 P: 92.267 or 92.212 Thomatical Programming (14 weeks) CyberEd/Online Course C++ compiler software	thy Niesen
92.268-011 C++ Programming M/W 5:00-8:00 pm 3 P: 92.267 or 92.212 Kenne (Held at Hanscom Air Force Base, Bedford) 92.268-023 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Depart 92.268-024 C++ Programming (14 weeks) T 7:00-10:00 pm 3 P: 92.267 or 92.212 Thomas 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 P: 92.267 or 92.212; requires Mark I C++ compiler software	Marie Hurley
92.268-023 C++ Programming (14 weeks) M 7:00-10:00 pm 3 P: 92.267 or 92.212 Depart 92.268-024 C++ Programming (14 weeks) T 7:00-10:00 pm 3 P: 92.267 or 92.212 Thomas 92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 P: 92.267 or 92.212; requires Mark I C++ compiler software	eth Santos
92.268-025 C++ Programming (14 weeks) CyberEd/Online Course 3 P: 92.267 or 92.212; requires Mark I C++ compiler software	artment Faculty
	Hertel
	e Smith
92.269-021 Advanced C++ (14 weeks) CyberEd/Online Course 3 P: 92.268; requires C++ compiler Mark I	Hertel
software	ara Bancroft
92.311-011 Intro. to the UNIX Op. Sys. M/W 7:00-10:00 pm 3 Andre	ew Garside
92.311-022 Intro. to the UNIX Op. Sys. (14 weeks) CyberEd/Online Course 3 Fred V	na Mittra Vegliante
	McGowan McGowan
92.312-022 UNIX Shell Programming (14 weeks) CyberEd/Online Course 3 P: 92.311 Micha	ael Richards el Leach
	r Gagnon
92.363-011 Intro. to Data Analysis M-Th 9:45-11:45 am 3 P: 92.183 or equivalent Alexar	ander Olsen
92.419-021 Introduction to MATHEMATICA (14 weeks) CyberEd/Online Course 3 P: two semesters of calculus and Kenne one semester of programming;	artment Faculty neth Levasseur
92.474-021 Relational Database Concepts (14 weeks) CyberEd/Online Course 3 P: 92.267 Paul G	Giguere
*Students will not receive credit for both 92.267 and the 92.211/92.212 sequence. CERTIFICATE IN CLIENT/SERVER TECHNOLOGY (See page 3 for required courses.) CERTIFICATE IN FUNDAMENTALS OF INFORMATION TECHNOLOGY (See page 3 for required courses.) CERTIFICATE IN INTERNET SYSTEMS ADMINISTRATION CERTIFICATE IN INTRANET DEVELOPMENT (See page 3 for required courses.) CERTIFICATE IN MULTIMEDIA APPLICATIONS (See page 3 for required courses.) CERTIFICATE IN UNIX (See page 3 for required courses.) CERTIFICATE IN WEBSITE DESIGN AND DEVELOPMENT (See page 3 for required courses.)	
Interactive (See courses listed under Art and Information Technology.) CERTIFICATE IN INTERACTIVE GAME DESIGN (See page 4 for required courses.)	
Languages 52.335-011 Cinema and Italian Americans M-Th 9:45-11:45 am 3 Area II, HV, AE Mario 52.378-011 Italian Cinema and Culture M-Th Noon-2:00 pm 3 Area II, HV, AE Mario	
54.101-011 Beginning Spanish I M-Th 7:30-9:30 am 3 J. Heli	eli Hernandez artment Faculty
54.211-011 Intermediate Conversational Spanish I M-Th 9:45-11:45 am 3 P: 54.102 or equivalent; Area II J. Heli	eli Hernandez artment Faculty
CERTIFICATE IN SPANISH	irtinent racuity
Legal Studies 41.262-011 Introduction to Business Law T/Th 7:00-10:00 pm 3 BS, Collateral to Criminal Justice Depart	artment Faculty
Paralegal 41.367-011 Environmental Law M/W 7:00-10:00 pm 3 William	ene Reardon am Burke
Studies) 41.376-011 Family Law M/W 7:00-10:00 pm 3 Russe CERTIFICATE IN PARALEGAL STUDIES	sell Karl
courses, BSBA students and College	ld Downey
	ld Downey
of Management Dean permission 62.201-011 Marketing Principles T/Th 6:00-9:00 pm 3 P: 47.101, 48.101, 49.201 Micha 63.406.031 Purphasian and Materiala Management Dean permission	nael Mullen
(14 weeks) College of Mgmt. Dean permission; requires proctored exams	d Lewis
66.301-011 Organizational Behavior (6 weeks) CyberEd/Online Course 3 P: BSBA students and College of Stuart	liaz Khan rt Freedman
Management Dean permission 66.490-011 Strategic Management MW 9:45-12:45 pm 3 P: 61.301, 62.201, 63.371, 66.301, BSBA Louis	s Zivic
students and College of Mgmt. Dean perm.; priority for Summer 2000 grads	
69.231-011 Business Finance M/W 7:00-10:00 pm 3 P: 67.102, 49.201, 49.202 Mel E	

	No.	Title Indolupered at Inding	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
	69.253-011 69.253-012	Intro. to Mgmt. & Organizational Behavior Intro. to Mgmt. & Organizational Behavior	r M/W r CyberEd	7:00-10:00 pm d/Online Course	3 3	Committee of the commit	P. G. Zicari Stuart Freedom
	69.281-021 NOTE: Course transfer into t	(6 weeks) Purchasing Principles (14 weeks) es with the 69 prefix are not intended for m he College of Management day programs.	CyberEd atriculation	d/Online Course ng University of Ma	3 assachusett	P: 62.201; requires proctored exams students and may not	David Lewis
Mathematics (see also Information Technology)	90.111-011* 92.111-011 92.121-011 92.121-012**	Fundamentals of Algebra Mathematical Perspectives Precalculus Mathematics I Precalculus Mathematics I	T/Th M-Th M-Th T/Th	7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 6:30-9:30 pm	3 3 3 3	Liberal Arts majors; Area III, MA Area III, MA P: 90.111 or placement exam,***	Anthony Sokolowski Stanley Spiegel Marvin Stick Candice Weston
os granda os granda	92.121-023	Precalculus Mathematics I (14 weeks)		d/Online Course	3	Area III, MA P: 90.111 or equivalent; Area III, MA; designed for students who can work independently in mathematics;	Alan Doerr
	92.122-011 92.122-012 92.123-011 92.125-011 92.126-011 92.128-011 92.131-011 92.131-012 92.132-012 92.132-011 92.183-012 92.183-012 92.183-011 92.234-011 92.234-011 92.321-011 92.321-011 92.321-011 92.321-012 92.322-011 92.321-012 92.322-011 92.321-012 92.322-011 92.363-011 92.363-011 92.366-011 92.407-011 92.411-011	Management Calculus Management Calculus Precalculus Mathematics II Calculus A Calculus B Calculus IA Calculus IB Calculus II Calculus II Calculus II Introduction to Statistics Introduction to Statistics Introduction to Statistics Introduction to Statistics (14 weeks) Calculus II Differential Equations Differential Equations Discrete Structures I Discrete Structures (14 weeks) Discrete Structures III Intro. to Data Analysis Statistics for Engineering and Science Probability and Mathematics Statistics I Complex Variables I Introduction to MATHEMATICA (14 weeks)	T/Th M-F M-Th T/Th CyberEc M-Th M-Th M-Th M/W M/W M-Th CyberEc	9:45-11:45 am 7:00-10:00 pm 6:30-9:30 pm 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:30-9:30 am 7:30-9:30 am 7:00-10:00 pm d/Online Course 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 0:45-11:45 am 7:00-10:00 pm 0:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 6:30-9:30 pm 9:45-11:45 am 6:30-9:30 pm	333334444433333433333333333333333333333	requires proctored exams P: 92.121; Area III, MA P: 92.125, MA MA P: 92.127, MA MA P: 92.131, MA P: 92.131, MA P: 90.111 or equivalent; Area III, MA P: 90.111 or equivalent; Area III, MA P: 90.111 or equivalent; Area III, MA P: 92.132, MA P: 92.132 or 92.225, MA P: 92.231 or 92.226 P: 92.231 or 92.232 P: 92.225 or 92.232 P: 92.231 or 92.226 P: two semesters of calculus and one semester of programming; requires MATHEMATICA software	Alan Kaplan Department Faculty Michael Williamson Robert Gravina Theresa Schille Department Faculty Ronald Brent Department Faculty Alan Kaplan Marvin Stick Rida Mirie Alexander Olsen Michael Williamson Ann Marie Hurley Philip Breen Ronald Brent Rida Mirie Alan Doerr Alan Doerr Department Faculty Alexander Olsen Lee Jones Lee Jones Ronald Brent Kenneth Levasseur
aruod haliihadaa Vaa Vechanical	**Students will of 90.112 and ***Placement ex Many 500-lev contact the G Coordinator b	ram is given the first evening of class. The courses are well within the grasp of upper aduate School for admissions procedures. The courses with a 90 prefix. Statics	er-level undersite M-Th	ndergraduates and y of Massachusett 9:45-11:45 am	may be uses Lowell da	ed as electives. Refer to the Graduate Soly students must have approval from the P: 92.132, 95.141	chool listing and Mathematics Jennifer Gorczyca
Engineering	22.403-011	M.E. Lab II: Measurement Engineering	T/Th	3:00-7:00 pm	3 (4)	P: 22.302, 22.311, 22.342 and Department Head permission	Glen Bousquet
Mechanical Engineering Technology and Manufacturing Option Multimedia Applications	CERTIFICATE CERTIFICATE	CADrf IN COMPUTER-ASSISTED MANUFACTUR IN MANUFACTURING TECHNOLOGY IN QUALITY ASSURANCE s under Art, Information Technology, and Co		7:00-10:00 pm	3	P: 23.101	Norman Truscott
		IN MILITIMEDIA APPI ICATIONIS (See nac	mputer S	Science.)			
Music	For Summer	Music Education Program, see page xx.	ge 3 for re	equired courses.)		D. 71 101	Line Claveland
NEV	For Summer 71.102-011 71.104-011 71.110-011 71.201-011 71.203-011 74.261-011 V! 77.499-011	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1 Music Business Internship	M-Th M-Th M-Th M-Th M-Th M-Th TBA	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am	3 1 3 3 1 3 3 6	P: 71.101 P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104 P: Permission of Chair	Lisa Cleveland Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan
NEV NEV Paralegal (see also Legal Studies and Criminal	For Summer 71.102-011 71.104-011 71.110-011 71.201-011 74.261-011 74.261-011 77.499-011 78.493-011 41.367-011 41.376-011 44.497-011	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1	M-Th M-Th M-Th M-Th M-Th M-Th TBA	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am	1 3 3 1 3	P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104	Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan William Moylan Eugene Reardon William Burke Russell Karl
Paralegal (see also Legal Studies and Criminal Justice)	For Summer 71.102-011 71.104-011 71.110-011 71.201-011 74.261-011 74.261-011 77.499-011 78.493-011 41.367-011 41.376-011 44.497-011	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1 Music Business Internship Internship in Sound Recording Technolog Corporate and Property Law Environmental Law Family Law Paralegal Practicum	M-Th M-Th M-Th M-Th M-Th M-Th TBA yTBA T/Th M/W	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am TBA TBA 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	1 3 3 1 3 6 3 3 3	P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104 P: Permission of Chair P: Permission of Chair P: minimum of 3 paralegal courses and Chair permission;	Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan William Moylan Eugene Reardon William Burke Russell Karl
	For Summer 71.102-011 71.102-011 71.104-011 71.201-011 71.203-011 74.261-011 77.499-011 77.493-011 41.367-011 41.376-011 44.497-011 CERTIFICATE 45.201-011 45.202-011 45.203-011	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1 Music Business Internship Internship in Sound Recording Technolog Corporate and Property Law Environmental Law Family Law Paralegal Practicum EIN PARALEGAL STUDIES Introduction to Philosophy Introduction to Logic Introduction to Ethics	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am TBA 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	1 3 3 1 3 3 6 3 3 3 3 3 3 3	P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104 P: Permission of Chair P: Permission of Chair P: minimum of 3 paralegal courses and Chair permission; call (978) 934-2765 Area II and VC, HV	Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan William Moylan Eugene Reardon William Burke Russell Karl Department Faculty Thomas Hersey Peter Skagestad Tracey Stark
Paralegal (see also Legal Studies and Criminal Justice) Philosophy Physics	For Summer 71.102-011 71.102-011 71.102-011 71.104-011 71.10-011 71.203-011 74.261-011 77.499-011 78.493-011 41.363-011 41.367-011 44.497-011 CERTIFICATE 45.201-011 45.202-011 45.203-011 45.203-011 45.314-011 95.141-011 96.103-011 96.144-011 99.101-011 99.102-011 27.251-011 27.453-011 Note: Course	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1 Music Business Internship Internship in Sound Recording Technolog Corporate and Property Law Environmental Law Family Law Paralegal Practicum EIN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics Science Fiction and Philosophy General Physics I Physics I Physics I Experimental General Physics I Experimental Physics I Experimental Physics II Radiation and Life	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am 7:30-9:30 am 7:30-9:30 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 9:45-11:45 am 2:45-5:15 pm 7:00-10:00 pm 7:00-10:00 pm	1 3 3 1 3 3 6 3 3 3 3 3 3 3 3 3 3 3 3 3	P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104 P: Permission of Chair P: Permission of Chair P: Permission of Chair P: minimum of 3 paralegal courses and Chair permission; call (978) 934-2765 Area II and VC, HV Area II and VC, HV Area II and VC, HV VC, HV P: Algebra; C: 96.103; SL C: 92.131, 96.141; SL P: 95.141; C: 92.132, 96.144; SL C: 95.103 or 95.201; SL C: 95.141; SL P: 96.141; SL P: 96.141; C: 95.144; SL P: 99.102; SL, Area III	Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan William Moylan Eugene Reardon William Burke Russell Karl Department Faculty Thomas Hersey Peter Skagestad Tracey Stark James Hart Arthur Mittler F. Raymond Hardy Kunnat Sebastian Arthur Mittler F. Raymond Hardy David Pullen Douglas Lamay Douglas Lamay Department Faculty
Paralegal (see also Legal Studies and Criminal Justice) Philosophy Physics Plastics Political Science	For Summer 71.102-011 71.102-011 71.102-011 71.104-011 71.10-011 71.203-011 74.261-011 77.499-011 78.493-011 41.363-011 41.367-011 44.497-011 CERTIFICATE 45.201-011 45.202-011 45.203-011 45.203-011 45.314-011 95.141-011 96.103-011 96.144-011 99.101-011 99.102-011 27.251-011 27.453-011 Note: Course	Music Education Program, see page xx. Music Theory 2 Aural Skills 2 Basic Music Theory Music Theory 3 Aural Skills 3 Survey of Music History 1 Music Business Internship Internship in Sound Recording Technolog Corporate and Property Law Environmental Law Family Law Paralegal Practicum EIN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics Science Fiction and Philosophy General Physics I Physics I Physics II Experimental General Physics I Experimental Physics I Experimental Physics I Experimental Physics I Radiation and Life Radiation and Life Radiation and Life Lab Selected Topics I Selected Topics I Selected Topics III swith the 27 prefix are not eligible for grad	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 9:45-11:05 am 7:00-10:00 pm 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am 9:45-11:05 am 7:30-9:30 am 7:30-9:30 am 7:30-9:30 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 9:45-11:45 am 2:45-5:15 pm 7:00-10:00 pm 7:00-10:00 pm	1 3 3 1 3 3 6 3 3 3 3 3 3 3 3 3 3 3 3 3	P: 71.103 Non-Music majors; Area II, AE P: 71.102 P: 71.104 P: Permission of Chair P: Permission of Chair P: Permission of Chair P: minimum of 3 paralegal courses and Chair permission; call (978) 934-2765 Area II and VC, HV Area II and VC, HV Area II and VC, HV VC, HV P: Algebra; C: 96.103; SL C: 92.131, 96.141; SL P: 95.141; C: 92.132, 96.144; SL C: 95.103 or 95.201; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: 99.102; SL, Area III C: 99.101; SL, Area III P: Coordinator permission	Mark Peterson Juanita Tsu Mark Peterson Lisa Cleveland John Ogasapian William Moylan William Moylan Eugene Reardon William Burke Russell Karl Department Faculty Thomas Hersey Peter Skagestad Tracey Stark James Hart Arthur Mittler F. Raymond Hardy Kunnat Sebastian Arthur Mittler F. Raymond Hardy David Pullen Douglas Lamay

		No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
mocos	of 219 Spane	47.260-011 47.272-022	Human Development I Abnormal Psychology (14 weeks)	M/W CyberEd/	7:00-10:00 pm Online Course	3	Area I, BS P: 47.101; Area I, BS; requires CommonSpace software	Phyllis Wentworth Richard Siegel
de d	ed ravet i	47.277-011 47.328-011 47.335-022 47.351-011 47.361-011 47.473-011	Sensation and Perception Dynamics of Interpersonal Relations Psychology and Women (14 weeks) Human Sexuality Prob./Issues in Child/Adolescent Psych. Seminar: Social Psychology	M-Th M/W CyberEd/ M-Th T/Th M/W	9:45-11:45 am 6:00-9:00 pm /Online Course 9:30-11:30 am 7:00-10:00 pm 2:15-5:15 pm	3 3 3 3 3	P: 47.101 Area I P: 47.101 P: 47.209, 47.269; AMST	David Landrigan Noel Cartwright Charlene Drake Mary Duell S. McLaughlin Beltz Peter Hantzis
Radiological Science	arnadi.	(See Physics.)	A less than					
Regional Economic and Social Developmen	esta.	57.475-011	Community Conflict Resolution	T/Th	7:00-10:00 pm	3	ABLIE BERTOERE COURT THE DESTRUCTION OF THE COURT OF THE COURT OF THE COURT OF TH	David Turcotte
Sociology	NEW!	48.101-011 48.101-022 48.255-011 48.317-011 48.325-011	Introduction to Sociology Introduction to Sociology (14 weeks) Sociology of Deviance Sociology of Genocide Social Inequality	M/W CyberEd/ M-Th T/Th M-Th	7:00-10:00 pm /Online Course 9:45 am-11:45 am 7:00-10:00 pm Noon-2:00 pm	3 3 3 3	Area I, BS Area I, BS P: 48.101 P: 48.101 P: 48.101	Levon Chorbajian John Ost Daniel Egan Levon Chorbajian Daniel Egan
Technical Writing	roatA roatA abbr	42.403-021 Technical Writ CERTIFICATE	Advanced Software Writing (14 weeks) ing courses are open to undergraduate and IN TECHNICAL WRITING (See page 4 for	T d graduate required co	7:00-10:00 pm students. ourses.)	3	P: 42.402	David Locke
Water/Waste Water Option		CERTIFICATE	ineering Technology: Water/Wastewater C IN WASTEWATER TREATMENT (See page IN WATER TREATMENT (See page 5 for r	e 5 for requ	uired courses.) urses.)			
Website Design and Developmen	et and		under Art and Information Technology.) IN WEB DESIGN AND DEVELOPMENT (S	See page 3	for required course	s.)		TOTAL SERVICE

REMINDER: THIS COURSE LISTING COMBINES THE UNIVERSITY OF MASSACHUSETTS LOWELL DAY SCHOOL COURSES AND THE CONTINUING STUDIES COURSES. IT IS IMPORTANT TO CHECK COURSE NUMBERS AND PREREQUISITES TO ENSURE ENROLLMENT IN THE CORRECT CLASS.

Summer Session II July 10-August 17, 2000

Day Classes begin on July 10 and meet Monday through Thursday for 3-credit courses and meet Monday through Friday for 4-credit courses.

M/W Evening Classes begin on July 10 and include 2 FRIDAYS: July 14 and July 28 at the regularly scheduled hours.

T/Th Evening Classes begin on July 11 and include 2 FRIDAYS: July 21 and August 4 at the regularly scheduled hours.

personal acres	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Accounting	60.202-021 60.331-021	Accounting/Managerial Cost Management Systems	M/W T/Th	7:00-10:00 pm 7:00-10:00 pm	3 3	P: 60.201 or 67.102 P: 60.202, BSBA (non-Acct. majors) and Coll. of Mgmt. Dean permission	Paul Brown Paul Brown
	College of Ma *Students may	es with the 67 prefix are not intended for anagement and may not transfer into the lay not receive credit for both 60.201 and 67 IN ACCOUNTING	BSBA progr		Bachelor of		
Art/Computer Graphics	(Also see Info (See listings of 70.391-021	ormation Technology for additional Multimounder Summer I for 14-week offerings.) Website Design/Windows	edia and We	eb Development co 7:00-10:00 pm	ourse offeri	ngs.) P: 70.262, or 90.231 and 90.238	Department Faculty
Art History	58.101-021 58.494-021	Art Appreciation Directed Studies	T/Th TBA	7:00-10:00 pm TBA	3	Area II, AE/Cultural Diversity HSA	Charles Giuliano Liana Cheney
Biological Sciences	83.214-021	Human Ecology	M-Th	9:45-11:45 am	3	Area III; SL	Priscilla Mattson
Chemistry	84.112-021 84.114-021 84.122-021	General Chemistry II General Chemistry II Lab Chemistry II	M-Th M/W/Th M/VV	Noon-2:00 pm 2:15-5:15 pm 7:00-10:00 pm	3 1 (3) 3	P: 84.111; SL P: 84.113; C: 84.112; SL P: 84.121; Science, Eng. & Eng. Tech. majors; others with departmen	Susan McFarland Athena Letsou Judith Goldsberry
	84.124-021 84.222-021 84.230-021 86.224-021 86.226-021	Chemistry Lab II Organic Chemistry II A Organic Chemistry Lab II A Principles of Organic Chemistry II Principles of Organic Chemistry II	T/Th M-Th M/W/Th T/Th M/W	7:00-10:00 pm Noon-2:00 pm 2:15-6:15 pm 7:00-10:00 pm 6:00-9:00 pm	1 (3) 3 1 (4) 3 1 (4)	permission; C: 84.124; SL P: 84.123; C: 84.122; SL P: 84.221; C: 84.230; SL P: 84.229; C: 84.222; SL P: 86.223; C: 86.226; SL P: 86.225; C: 86.224; SL	Paul Damour Gene Davis Judith Freeman Gene Davis Judith Freeman
Cinema	52.374-021 52.380-021	Classics of Italian Cinema Italian Cinema: Directors and Themes	M-Th M-Th	9:45-11:45 am 7:30-9:30 am	3 3	Area II, HV, AE Area II, HV, AE	Mario Aste Mario Aste
Civil Engineering Fechnology		E IN ENVIRONMENTAL TECHNOLOGY (S E IN LAND SURVEYING	ee page 4 f	or required course	s.)	The second secon	
Civil Engineering Fechnology: Water/ Wastewater Option	CERTIFICATE	IN HAZARDOUS WASTE MANAGEMEN IN WATER TREATMENT (See page 5 for IN WASTEWATER TREATMENT (See pag	required co	urses.)	urses.)	The same of the sa	
Computer Science see also nformation Fechnology)		n-tech & specialized courses are \$185 per under Computer Science in Summer I for Exploring the Internet Exploring the Internet				s are \$205 per credit.	Department Facult Marjan Trutschl

	No.	Title (A)	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Criminal Justice (see also Paralegal Studies)		Computer Applications Juvenile Delinquency Practicum IN COMMUNITY POLICING (See page 4 for IN PARALEGAL STUDIES	M-Th M/W TBA or required	9:45-11:45 am 7:00-10:00 pm TBA d courses.)	3 3 3	P: Instructor permission	Allan Roscoe Steven Sacco Allan Roscoe
Economics	49.201-021 49.201-022 49.202-021 49.202-022 49.211-021 49.212-021	Economics I (Microeconomics) Economics I (Microeconomics) Economics II (Macroeconomics) Economics II (Macroeconomics) Statistics I Statistics II	M-Th M/W M-Th T/Th M-Th T/Th	9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm	3 3 3 3 3	Area I, BS Area I, BS Area I, BS Area I, BS P: 92.122 or equivalent, BS P: 49.211, BS	Harjeet Khosla Rudolph Matty Paul Snoonian Patricia Machado Rudolph Matty Harjeet Khosla
Electrical and Computer Engineering	16.312-021 16.312-022 16.360-021 16.491-021 16.492-021 16.493-021	Electronics II Lab Electronics II Lab Electromagnetic Theory Industrial Experience Industrial Experience Industrial Experience	M/W M/W M-Th TBA TBA TBA	4:00-7:00 pm 7:00-10:00 pm 7:00-9:00 pm TBA TBA TBA	2 (3) 2 (3) 3 3 3	P: 16.311; C: 16.366 P: 16.311; C: 16.366 P: 16.202, 92.234 P: Permission by Alan Rux P: Permission by Alan Rux P: Permission by Alan Rux	Alan Rux Alan Rux Dikshitulu Kalluri Alan Rux Alan Rux Alan Rux
English	42.101-021 42.102-021 42.102-022 42.104-021	College Writing I College Writing II College Writing II College Writing II for International	M/W M-Th T/Th M/W	7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3	P: 42.101 P: 42.101 P: 42.103	Marjorie Horton Department Faculty Department Faculty C. Mahadeswaraswamy
	42.212-021 42.217-021 42.224-021* 42.232-021 42.295-021 42.301-021 42.304-021 *Please note th CERTIFICATE	Students The Short Story The Horror Story Business Writing Fiction Into Film History of American Literature II Newswriting Creative Writing: Screenwriting nat students may not receive credit for both IN TECHNICAL WRITING (See page 4 for receive)	M-Th T/Th M/W M/W M-Th M/W M/W 42.224 a equired c	7:30-9:30 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm and 42.226. ourses.)	3 3 3 3 3 3	P: 42.102; Area II, LT P: 42.102; Area II, LT P: 42.102 P: 42.102; Area II, LT P: 42.102 P: 42.102	Dina Bozicas Henry Venuti Richard Keating Jeannie Lloyd Henry Venuti Bridget Driscoll Richard Farrell
Graphic Design and Digital Imaging	(See courses I CERTIFICATE	listed under Art and Information Technology IN GRAPHIC DESIGN AND DIGITAL IMAG	/.) ING (See	page 4 for required	l courses.)		
Health Professions	30.305-021 30.307-021 35.102-021 35.104-021 CERTIFICATE	Exercise Physiology Lecture Exercise Physiology Lab Human Anatomy and Physiology II Human Anatomy & Physiology II Lab IN NUTRITION	M-F M/T/Th M-Th T/W/Th	9:45-11:45 am 1:00-4:00 pm 9:45-11:45 am 1:00-4:00 pm	4 1 (3) 3 1 (3)	P: A. and P., Chemistry; SL C: 30.305; SL P: 35.101; C: 35.104; SL P: 35.103; C: 35.102; SL	Department Faculty Department Faculty Ted Namm Alease Bruce
History (see also Art History)	43.111-021 43.314-021 43.341-021	U.S. History to 1877 U.S. Social History Since 1880 Cosmopolitan Boston: 1865–1915	M/W M/W T/Th	7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3	Area II, HS Area II, HS Area II, HS	Harry Hubbard Robert Lemire Mark Rennella
Information Technology (including Multimedia and Computer Graphics)	(Also see listin 90.171-021 90.230-021 90.231-021 90.232-021 90.246-021 90.291-023	Applications Software: Access Intro. to Multimedia/Windows Graphics for Multimedia/Windows Desktop Video Production/Mac Active Server Pages Intro. to HTML	T/Th M/W T/Th M/W T/Th T/Sat	6:00-9:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3	P: 90.230 P: 90.230 P: 90.238 or instructor permission	Richard Abers Chris Perry Marina Javis Department Faculty Department Faculty Justin Seiferth
Please Note: All information	90.292-021 90.458-021 90.461-021 90.461-023	(Held at Hanscom Air Force Base, Bedford) Advanced HTML Advanced Topics in Computer Security (Held at Hanscom Air Force Base, Bedford) LAN/WAN LAN/WAN	T/Th T/Th M/W M/W	7:00-10:00 pm 7:00-10:00 pm 5:00-8:00 pm	3 3 3 3	P: 90.291 P: 90.457 or instructor permission	David Sciuto Richard Smith Alan Wu David Bukouricz
technology/ high-tech and specialized courses are \$185 per credit; All CyberEd and off-campus courses are	92.202-021 92.202-022 92.211-021* 92.211-022* 92.212-021 92.220-021	(Held at Hanscom Air Force Base, Bedfor Intro. to PCs & MS Office Intro. to PCs & MS Office Intro. to Programming with C Il Visual Basic	d) M/W T/Th M/W T/Th T/Th T/Th	6:00-9:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3	P: 92.121 or equivalent P: 92.121 or equivalent P: 92.211 P: Windows and working knowledge of a high-level language	Adrianna Morris Department Faculty James Brzowski Department Faculty James Brzowski Leo Javis
\$205 per credit.	92.220-022 92.267-021* 92.267-022* 92.267-023* 92.268-021 92.268-022 92.270-021 92.311-021	Visual Basic C Programming C Programming C++ Programming C++ Programming Visual C++ Intro. to UNIX Operating System	M/W T/Th T/Th M/W T/Th M/W M/W	7:00-10:00 pm 6:00-9:00 pm 7:00-10:00 pm 6:00-9:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3 3	P: Windows and working knowledge of a high-level language P: previous prog. experience P: previous prog. experience P: previous prog. experience P: 92.267 or 92.212 P: 92.268 P: 92.267 or 92.211, and 92.364	Lee Clark Department Faculty Nancy Kiernan Department Faculty Daniel Leach Barbara Bancroft Partha Mittra
	CERTIFICATE CERTIFICATE CERTIFICATE CERTIFICATE CERTIFICATE CERTIFICATE	UNIX Shell Programming not receive credit for both 92.211 and 92.2 IN CLIENT/SERVER TECHNOLOGY (See pIN DATA/TELECOMMUNICATIONS (See pIN FUNDAMENTALS OF INFORMATION TIN INTERNET SYSTEMS ADMINISTRATION INTRANET DEVELOPMENT (See page IN MULTIMEDIA APPLICATIONS (See page IN UNIX (See page 3 for required courses.)	age 3 for age 3 for ECHNOL N 3 for requ e 3 for re	7:00-10:00 pm required courses.) required courses.) .OGY (See page 3 f uired courses.)	3	P: 92.311	Sean McGowan
Interactive Game Design		listed under Art and Information Technology IN INTERACTIVE GAME DESIGN (See pag		quired courses.)			
Languages	52.374-021 52.380-021 54.102-021 54.102-022 54.212-021 54.212-022 CERTIFICATE	Classics of Italian Cinema Italian Cinema: Directors and Themes Beginning Spanish II Beginning Spanish II Intermediate Conversational Spanish II Intermediate Conversational Spanish II IN SPANISH	M-Th M-Th M-Th M/VV M-Th T/Th	9:45-11:45 am 7:30-9:30 am 7:30-9:30 am 7:00-10:00 pm 9:45-11:45 am 7:00-10:00 pm	3 3 3 3 3	Area II, VC, AE Area II, VC, AE P: 54.101 or equivalent P: 54.101 or equivalent P: 54.211 or equivalent; Area II P: 54.211 or equivalent; Area II	Mario Aste Mario Aste J. Heli Hernandez Department Faculty J. Heli Hernandez Department Faculty
Legal Studies (see also Paralegal Studies)	41.370-021 41.376-021 41.381-021 41.387-021 CERTIFICATE	Real Estate Law Family Law Women and the Law Legal Research Methods IN PARALEGAL STUDIES	M/W T/Th M/W T/Th	7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3		J. Alan Roberts Russell Karl Department Faculty Nancy Dick

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
nagement	61.301-021	Business Finance	T/Th	6:00-9:00 pm	3	P: College of Mgmt. filter courses, BSBA students and College of Management Dean permission	Frank Andrews
	63.371-021	Operations Management	M-Th	9:45-11:45 am	3	P: 63.210, BSBA students and College of Mgmt. Dean permission	George Liaw
	69.251-021	Personnel Management	M/W	7:00-10:00 pm	3	College of Migrit. Dean permission	P. G. Zicari
		Entrepreneurial Management is with the 69 prefix are not intended for management day programs.	T/Th atriculatir	7:00-10:00 pm ng University of Mas	3 sachusett	s Lowell day students and may not	Mel Epstein
thematics	90.111-021*	Fundamentals of Algebra Precalculus Mathematics I	M/W M-Th	7:00-10:00 pm 7:30-9:30 am	3 3		Eugene Welch, Jr. Marvin Stick
ormation hnology)	92.121-022**	Precalculus Mathematics I	M/W	7:00-10:00 pm	3	Area III, MA P: 90.111 or placement exam;***	Candice Weston
	92.122-021	Management Calculus	M-Th	9:45-11:45 am	3	Area III, MA P: 92.121; Area III, MA	Alexander Olsen
	92.123-021 92.124-021	Precalculus Mathematics II Precalculus for Science and Engineering	T/Th M-Th	7:00-10:00 pm 9:45-11:45 am	3	P: 92.121; MA MA	Terence Watterson Department Faculty
	92.124-022	Precalculus for Science and Engineering	T/Th	6:30-9:30 pm	3	MA	Department Faculty
	92.125-021 92.126-021	Calculus A Calculus B	M/W M/W	7:00-10:00 pm 7:00-10:00 pm	3	P: 92.123; MA P: 92.125; MA	Robert Gravina Alan Kaplan
	92.131-021	Calculus I	M-F	9:45-11:45 am	4	MA	Marvin Stick
	92.132-021 92.132-022	Calculus II Calculus II	M-F M-F	7:30-9:30 am 9:45-11:45 am	4	P: 92.131; MA P: 92.131; MA	Alan Kaplan Ronald Brent
	92.183-021	Introduction to Statistics	M-Th	7:30-9:30 am	3	P: 90.111 or equiv.; Area III, MA	Alexander Olsen
	92.183-022 92.226-021	Introduction to Statistics Calculus D	M/W M/W	7:00-10:00 pm 7:00-10:00 pm	3	P: 90.111 or equiv.; Area III, MA P: 92.225; MA	Michael Williamsor Rida Mirie
	92.231-021	Calculus III	M-F	9:45-11:45 am	4	P: 92.132; MA	Ronald Brent
	92.234-021 92.321-021	Differential Equations Discrete Structures I	T/Th M/W	7:00-10:00 pm 7:00-10:00 pm	3	P: 92.132 or 92.225; MA P: 90.112 or 92.121	Rida Mirie Anthony Penta
	92.386-021	Statistics for Science and Engineering	MM	6:30-9:30 pm	3	P: 92.225 or 92.231	Lee Jones
	92.407-021 *Fundamentals	Probability and Math Statistics I of Algebra (90.111) is a preparatory course	M/W	6:30-9:30 pm	3 and a degr	P: 92.225 or 92.231	Lee Jones
chanical	contact the Gr	el courses are well within the grasp of upper aduate School for admissions procedures. efore taking courses with a 90 prefix. Dynamics	er-level ur Universit	ndergraduates and n y of Massachusetts 7:00-10:00 pm	nay be use Lowell da	ed as electives. Refer to the Graduate Soy students must have approval from the P: 22.211, 92.132	chool listing and e Mathematics Fuquan Gao
ineering							
ineering hnology	CERTIFICATE	IN COMPUTER-ASSISTED MANUFACTUR IN MANUFACTURING TECHNOLOGY IN QUALITY ASSURANCE					
tion Itimedia		er Mathematics Option and Computer Scie		aguired sources)	p Parasi	cottod reactor measure of the second	would would be a second
tion Itimedia blications	CERTIFICATE	IN MULTIMEDIA APPLICATIONS (See page		equired courses.)	Verification of the control of the c	cotsell matter meas	(I)
tion Itimedia plications	For Summer N 71.100-021	IN MULTIMEDIA APPLICATIONS (See pag Music Education Program, see page 5. Fundamentals of Musicianship	M-Th	7:30-9:30 am	3 Allen	Music majors only	Mark Peterson
tion Itimedia plications	For Summer N	IN MULTIMEDIA APPLICATIONS (See pag Music Education Program, see page 5.	je 3 for re	· vallyl	3	Music majors only	
tion Itimedia plications	For Summer N 71.100-021 71.101-021 71.102-021 71.110-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory	M-Th M-Th M-Th M/W	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm	3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf
tion Itimedia plications	For Summer N 71.100-021 71.101-021 71.102-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2	M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am	3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson
tion Itimedia plications	For Summer N 71.100-021 71.101-021 71.102-021 71.110-021 71.202-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Music Theory 4	M-Th M-Th M-Th M-W M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am	3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson
itimedia plications sic	For Summer N 71.100-021 71.101-021 71.102-021 71.110-021 71.202-021 71.204-021 78.301-021 41.370-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law	M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:05 am 9:45-11:45 am	3 3 3 1 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts
Itimedia plications sic	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 78.301-021 41.370-021 41.376-021 41.387-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods	M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am	3 3 3 1 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only	Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams
alegal e also al Studies Criminal tice)	For Summer N 71.100-021 71.101-021 71.102-021 71.110-021 71.202-021 71.204-021 78.301-021 41.376-021 41.387-021 CERTIFICATE	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:05 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick
nufacturing tion Itimedia plications sic Allegal e also gal Studies d Criminal stice) Iosophy	For Summer N 71.100-021 71.100-021 71.102-021 71.102-021 71.202-021 71.204-021 78.301-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:05 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 1 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl
alegal e also al Studies I Criminal tice)	For Summer N 71.100-021 71.100-021 71.102-021 71.102-021 71.202-021 71.204-021 78.301-021 41.376-021 41.387-021 CERTIFICATE 45.203-021 95.104-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M/W T/Th T/Th M/W T/Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:05 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 1 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler
alegal e also al Studies Criminal tice)	For Summer N 71.100-021 71.101-021 71.102-021 71.100-021 71.202-021 71.204-021 78.301-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.141-021 95.144-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod
alegal also al Studies Criminal tice)	For Summer N 71.100-021 71.101-021 71.102-021 71.100-021 71.202-021 71.204-021 71.370-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.144-021 96.104-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:05 am 9:45-11:45 am 7:00-10:00 pm	3 3 3 1 3 3 3 3 3 3 3 3 4) 3 (4) 1 (2)	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff
alegal also al Studies Criminal tice) osophy	For Summer N 71.100-021 71.101-021 71.102-021 71.100-021 71.202-021 71.204-021 78.301-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.141-021 95.144-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod
alegal e also al Studies Criminal tice) osophy	For Summer N 71.100-021 71.100-021 71.100-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 95.104-021 95.141-021 96.141-021 96.144-021 96.144-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics II Experimental Physics II Experimental Physics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:100-10:00 pm 7:00-10:00 pm 7:100-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2)	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.141; SL P: 96.141; C: 95.144; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff David Pullen
alegal also al Studies Criminal tice) osophy	For Summer N 71.100-021 71.100-021 71.100-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.144-021 96.144-021 96.144-021 96.144-021 27.452-021 27.452-021 27.452-021 27.452-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics I Experimental General Physics II Experimental Physics II Experimental Physics II Selected Topics II Selected Topics IV	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:50 pm 7:00-10:50 pm 7:00-10:50 pm 7:00-10:50 pm	3 3 3 1 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2)	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL C: 95.141; SL	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff David Pullen Department Facult
alegal also al Studies (Criminal tice)	For Summer N 71.100-021 71.100-021 71.100-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 95.141-021 95.144-021 96.144-021 96.144-021 96.144-021 27.452-021 27.452-021 27.452-021 Courses with	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics II Experimental Physics II Selected Topics II	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:05 am 9:45-11:45 am 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2) 1 (2)	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff David Pullen Department Facult
alegal also also also also also also also al	For Summer N 71.100-021 71.101-021 71.101-021 71.102-021 71.202-021 71.204-021 78.301-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 95.141-021 95.144-021 96.104-021 96.144-021 27.452-021 27.454-021 Courses with CERTIFICATE 46.101-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics I Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate of	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:00-10:00 pm 7:00-10:00 pm	3 3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2) 1 (2) 3 3 3 5 5 5 5 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission P: Coordinator permission P: Coordinator permission	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff David Pullen Department Facult Department Facult Department Facult
alegal e also pal Studies I Criminal etice)	For Summer N 71.100-021 71.101-021 71.101-021 71.102-021 71.202-021 71.204-021 78.301-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 95.141-021 95.144-021 96.104-021 96.144-021 96.144-021 27.452-021 Courses with CERTIFICATE	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 1 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2) 1 (2) 3 3 3 5 5 5 5 5 6 7 7 8 7 8 8 7 8 7 8 8 7 8 8 7 8 8 8 8	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission P: Coordinator permission Area I, BS Area I, BS	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff David Pullen Department Facult Department Facult Department Facult Department Facult
alegal e also al Studies I Criminal tice) losophy stics aligan de also al Studies I Criminal tice) losophy stics data de also al Studies I Criminal tice) losophy	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 96.104-021 96.104-021 96.104-021 96.104-021 27.452-021 27.452-021 27.452-021 27.452-021 27.452-021 46.101-021 46.101-021 46.101-021 47.232-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 9:45-11:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult Department Facult Department Facult Department Facult Paula McCabe Daryl Graves Department Facult
alegal also al Studies Criminal tice) osophy sics alegal also al Studies Criminal tice) osophy sics alegal also al Studies Criminal tice) osophy sics	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 96.104-021 96.104-021 96.104-021 96.104-021 27.452-021 27.452-021 27.452-021 27.452-021 46.101-021 46.121-021 47.232-021 47.272-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality Abnormal Psychology	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult
alegal also al Studies Criminal tice) osophy sics alegal also al Studies Criminal tice) osophy sics alegal also al Studies Criminal tice) osophy sics	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 96.104-021 96.104-021 96.104-021 96.104-021 27.452-021 27.452-021 27.452-021 27.452-021 27.452-021 46.101-021 46.101-021 46.101-021 47.232-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 9:45-11:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult Department Facult Department Facult Department Facult Paula McCabe Daryl Graves Department Facult
alegal alegal also pal Studies I Criminal tice) losophy sics duas transparations stics duas transparations duas tra	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.141-021 96.144-021 96.144-021 96.144-021 27.452-021 27.452-021 27.452-021 27.452-021 44.121-021 46.121-021 46.121-021 47.232-021 47.272-021 47.335-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate c IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality Abnormal Psychology Psychology and Women Brain, Mind and Behavior	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2) 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission P: Coordinator permission P: Coordinator permission P: Coordinator permission P: 47.101; Area I, BS P: 47.101; Area I, BS P: 47.101 P: 47.101	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult
alegal also al Studies Criminal tice) osophy sics altics a	For Summer N 71.100-021 71.101-021 71.102-021 71.202-021 71.204-021 71.204-021 71.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.141-021 96.144-021 96.144-021 27.452-021 27.452-021 27.452-021 27.452-021 41.373-021 47.373-021 48.101-021 48.321-021 48.321-021 48.321-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate c IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology and Women Brain, Mind and Behavior Introduction to Sociology Social Theory I	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4) 1 (2) 1 (2) 1 (2) 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL P: 96.141; C: 95.144; SL P: Goordinator permission P: Coordinator permission P: Coordinator permission Area I, BS Area I, BS P: 47.101; Area I, BS P: 47.101 P: 47.101 Area I, BS P: 48.101	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult Department Facult Department Facult Paula McCabe Daryl Graves Department Facult John Bayliss Charlene Drake Mary Duell Levon Chorbajian Jack Porter
ion timedia lications sic alegal also al Studies Criminal tice) osophy sics tics alegal also al Studies Criminal tice) tical alegal also alegal alegal also alegal also alegal also alegal also alegal also alegal alegal also alegal	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.141-021 96.144-021 96.144-021 27.452-021 27.452-021 27.452-021 27.452-021 41.373-021 47.272-021 47.272-021 47.335-021 47.373-021 48.101-021	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics I Experimental General Physics II Experimental Physics II Selected Topics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate c IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality Abnormal Psychology Psychology and Women Brain, Mind and Behavior Introduction to Sociology	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.141; SL P: 96.141; C: 95.144; SL P: Coordinator permission P: Coordinator permission P: Coordinator permission P: Coordinator permission P: 47.101; Area I, BS P: 47.101; Area I, BS P: 47.101 P: 47.101 Area I, BS	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult Department Facult Department Facult Paula McCabe Daryl Graves Department Facult John Bayliss Charlene Drake Mary Duell Levon Chorbajian
ion timedia dications sic alegal also al Studies Criminal tice) osophy sics tical ence chology iology NEW!	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 71.204-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 95.141-021 96.104-021 96.141-021 96.144-021 27.452-021 27.452-021 27.452-021 27.452-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 47.272-021 48.340-021 48.345-021 (See Civil Eng CERTIFICATE	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Physics II Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality Abnormal Psychology Psychology and Women Brain, Mind and Behavior Introduction to Sociology Social Theory I Sociology of Sports Urban Sociology Incering Technology: Water/Wastewater Of IN WASTEWATER TREATMENT (See page) Incering Technology: Water/Wastewater Of IN WASTEWATER TREATMENT (See page)	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL P: 96.141; C: 95.144; SL P: Goordinator permission P: Coordinator permission P: Coordinator permission Area I, BS Area I, BS P: 47.101; Area I, BS P: 47.101 P: 47.101 Area I, BS P: 48.101 P: 48.101	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult
alegal also al Studies Criminal tice) losophy sics alignment of the state of the s	For Summer N 71.100-021 71.101-021 71.102-021 71.102-021 71.202-021 71.204-021 78.301-021 41.376-021 41.376-021 41.387-021 CERTIFICATE 45.201-021 45.203-021 95.104-021 96.104-021 96.104-021 96.104-021 96.104-021 27.452-021 27.452-021 27.452-021 27.452-021 47.272-021 47.335-021 47.272-021 47.335-021 48.340-021 48.345-021 (See Civil Eng CERTIFICATE CERTIFICATE	Music Education Program, see page 5. Fundamentals of Musicianship Music Theory 1 Music Theory 2 Basic Music Theory 4 Aural Skills 4 Music, Technology, and Society Real Estate Law Family Law Legal Research Methods IN PARALEGAL STUDIES Introduction to Philosophy Introduction to Ethics General Physics II Physics I Experimental General Physics II Experimental Physics I Experimental Physics II Selected Topics II Selected Topics IV the 27 prefix are not eligible for graduate of IN PLASTICS ENGINEERING TECHNOLO Introduction to American Politics Introduction to International Relations General Psychology Psychology of Personality Abnormal Psychology Psychology and Women Brain, Mind and Behavior Introduction to Sociology Social Theory I Sociology of Sports Urban Sociology: Water/Wastewater O	M-Th M-Th M-Th M-Th M-Th M-Th M-Th M-Th	7:30-9:30 am 7:30-9:30 am 9:45-11:45 am 7:00-10:00 pm 9:45-11:45 am 9:45-11:45 am 9:45-11:45 am 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:00-10:00 pm 7:30-9:30 am 9:45-11:45 am 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 2:15-5:15 pm 7:00-10:00 pm	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Music majors only P: 71.101, Music majors only Non-Music majors; Area II, AE P: 71.201, Music majors only P: 71.203, Music majors only Non-Music majors; Area II, AE Area II and VC, HV Area II and VC, HV P: 95.103; C: 96.104; SL P: 92.131; C: 96.141; SL P: 95.141, 92.132; C: 96.144; SL C: 95.104; SL P: 96.141; C: 95.144; SL P: Goordinator permission P: Coordinator permission P: Coordinator permission Area I, BS Area I, BS P: 47.101; Area I, BS P: 47.101 P: 47.101 Area I, BS P: 48.101 P: 48.101	Mark Peterson Lisa Cleveland Lisa Cleveland Thomas Stumpf Mark Peterson Department Facult Alan Williams J. Alan Roberts Russell Karl Nancy Dick Donald LeBlanc Elizabeth Gleason Arthur Mittler Paul Ring Roger McLeod Department Staff Department Staff Department Facult

REMINDER: IT IS IMPORTANT TO CHECK COURSE NUMBERS AND PREREQUISITES TO ENSURE ENROLLMENT IN THE CORRECT CLASS.

Summer Session I Graduate Courses

Except as noted: Day classes begin on May 22.

M/W Evening Classes begin on May 22 and include 3 FRIDAYS: June 2, June 16, and June 30. **T/Th Evening Classes** begin on May 23 and include 2 FRIDAYS: June 9 and June 23.

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Business Administration	Core courses.	pen to students who are matriculated in the Courses also are available to non-UML stu	e Universi dents wh	ty of Massachusett o are currently enro	s Lowell N lled in oth	MBA Program and who have completed er AACSB-accredited master's programs	Foundation and have the
	required prere 61.691-011	International Financial Management (4 weeks)	CyberEd	/Online Course	3	P: Course has online/on-campus meeting requirements. See	Yash Puri
	62.660-011	Marketing Communications	M/W	6:00-9:00 pm	3	cybered.uml.edu before registering.	Duncan LaBay
Criminal Justice	44.622-011 44.682-021	Family Violence Special Topics: Alcohol, Drugs, and Crime (May 30–July 12)	T/Th T/Th	6:00-9:00 pm 6:00-9:00 pm	3	Two-way TV broadcast from UMass Boston to UMass Lowell	E. Buzawa/G. Hotalin
Electrical and	16.504-011	VLSI Fabrication (6 weeks)	W/F	9:00 am-Noon	3	P: 16.365	Kanti Prasad
Computer Engineering	16.528-011 16.529-021 16.575-021* 16.576-021* 16.692-011 16.712-021*	Alternate Energy Sources (6 weeks) Electric Vehicle Technology (6 weeks) FPGA Logic Design Techniques Fuzzy Systems Theory and Applications Directed Studies (6 weeks) Special Topics: Guidance, Navigation and Control Systems Technology Directed Studies (6 weeks)	T/Th labs M/W T/Th T/Th T/Th M/W TBA T/Th	6:00-9:00 pm 6:00-9:00 pm 6:00-8:00 pm 6:00-8:00 pm TBA 6:00-8:00 pm	3 3 3 3 3 3	P: Instructor permission P: Instructor permission P: Logic Design P: Signals & Systems, Logic Design P: Department faculty permission P: Signals and Systems P: Department faculty permission	Ziyad Salameh Ziyad Salameh James Moran Syama Chaudhuri Department Faculty Syama Chaudhuri
	*Note: Ten-we	ek Electrical and Computer Engineering co July 26 or Thursday, July 27.				y, May 23, with final exams on the last of	Department Faculty course meeting on
Health Professions	34.615-011	Clinical Education Experience I	M-F	8:00 am-5:00 pm	2 (4)	P: First-year Physical Therapy graduate students only	Department Faculty
Wathematics	92.500-011 92.535-011 92.550-011	Discrete Structures History of Mathematics Mathematical Modeling	T/Th T/Th M/W	3:15-6:00 pm 6:00-9:00 pm 6:00-9:00 pm	3 3 3	P: 92.231 or 92.222	Alan Doerr Joyce Williams James Graham-Eagl
Music	For Summer N	Music Education Programs, see page 5.		(Bastring 4: 27			
Psychology	47.502-011	Seminar in Forensic Psychology:	T/Th	3:30-6:30 pm	3		Alexandria Weida
	47.503-011 47.531-011	Mental Health and the Law Applied Social Psychology Substance Abuse	M/W T/Th	6:00-9:00 pm 6:00-9:00 pm	3 3		Elizabeth Murphy Peter Hantzis
Regional, Economic, and Social	57.512-011	Community Conflict Resolution	T/Th	7:00-10:00 pm	3		David Turcotte

REMINDER: IT IS IMPORTANT TO CHECK COURSE NUMBERS AND PREREQUISITES TO ENSURE ENROLLMENT IN THE CORRECT CLASS.

Summer Session II Graduate Courses

Except as noted: Day classes begin on July 10.

M/W Evening Classes begin on July 10 and include 2 FRIDAYS: July 14 and July 28. T/Th Evening Classes begin on July 11 and include 2 FRIDAYS: July 21 and August 4.

	No.	Title	Eve	Time	Cr (Co)	P: Prerequisite C: Corequisite/Comments	Instructor
Business		open to students who are matriculated in s. Courses also are available to non-UML sequisites.					
	61.610-021 62.601-021	Financial Markets/Monetary Policy Analysis of Customers and Markets	T/Th M/W	6:00-9:00 pm 6:00-9:00 pm	3 3		Michael Carter Eunsang Yoon
Electrical and Computer Engineering	(See listings	under Summer I for 10-week offerings.)		2021			ses Académic Calend oriate ragistration de
Health Professions	34.634-021	Clinical Education Experience II	M-F	8:00-5:00 pm	2 (4)	P: Clinical Education Experience I, Second-year Physical Therapy graduate students only	Department Faculty
Mathematics	92.527-021	Geometry	M-Th	Noon-2:00 pm	3	P: T.I. 92 required	Marvin Stick
Music	For Summer	Music Education Programs, see page 5.					
Psychology	47.502-021 47.551-021	Seminar: Diversity in the Family Psychosocial Aspects of Aging	M/W T/Th	6:00-9:00 pm 6:00-9:00 pm	3		Jerry Schwartz Kevin Callahan

info

Office Hours

Advising Center, Southwick Hall 223 Monday-Friday: 8:30 am-5:00 pm

Enrollment Services/Continuing Studies and Corporate Education, Southwick Hall 223 Monday-Thursday: 8:30 am-8:30 pm Friday: 8:30 am-5:00 pm

Holiday Hours and Special Hours

May 28: Commencement May 29: Memorial Day (University closed) July 4: University closed

The week of July 3 through July 8 (closed July 4), the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-5:00 pm.

The week of August 21 through August 26, the Office of Enrollment Services/Continuing Studies will be open from 8:30 am-7:00 pm.

Phone Directory

Bookstore — North Campus	(978) 934-2623
Bookstore — South Campus	(978) 934-6908
Continuing Studies	
Main Number	(978) 934-2480
Continuing Studies	
Fax Number	(978) 934-3087
Continuing Studies	
Advising Center	(978) 934-2474
Continuing Studies	
Enrollment Services	(978) 934-2480
Library — North Campus	
(Alumni/Lydon)	(978) 934-3205
Library — South Campus	
(O'Leary)	(978) 934-4550
Phone-In Registration —	
Operator Assisted	(978) 934-2700
Phone-In Registration —	
Automated	(978) 934-2050
UMass Lowell Main Number	(978) 934-4000
UMass Lowell Online Directions	(978) 934-2480
Weather Cancellations	(978) 934-2480
	(978) 934-2121

See our Website at http://continuinged.uml.edu



Register Early

Get a head start and register early! Although we cannot guarantee an

earry! Although we cannot guarantee a opening in any class, your chances for

being enrolled in the course of your choice are better when you register early. Remember — seats in laboratory courses are limited.

We encourage you to mail in or phone in your registration in sufficient time to guarantee the class of your choice and to receive your class-room confirmation.

See Academic Calendars on page 18 for appropriate registration deadlines.

Mail-In Registration

- Fill out the registration form and return it postmarked no later than the scheduled deadline.
- Mail to: University of Massachusetts Lowell Enrollment Services/Continuing Studies and Corporate Education

 One University Avenue

One University Avenue Lowell, MA 01854-2881

- Payment must be made with the registration form, either by check, money order, VISA, MasterCard, or Discover. Make checks payable to: University of Massachusetts Lowell.
- Students will receive class confirmation, room assignment, receipt and ID by mail before the first class meeting.

Fax-In Registration

Fill out the registration form and fax it to (978) 934-3087 no later than the scheduled deadline. Be sure to include your VISA, MasterCard, or Discover number.

Phone-In Registration with an Operator

- Payment can be made by VISA, MasterCard, or Discover only.
- Call (978) 934-2700. Please refer to the Office of Enrollment Services/Continuing Studies hours for phone-in registration times. The registration staff may take only registration information. If you have any questions concerning courses and academic programs, please call (978) 934-2480 or the Advising Center at (978) 934-2474.

Automated Phone-In Registration Using the Voice Response System (Credit Courses Only): Dial (978) 934-2050 or (978) 934-2049

Students who are presently enrolled at the University of Massachusetts Lowell, Continuing Studies and Corporate Education and who have a Continuing Studies PIN (students registered during Fall and Spring), may now register for summer classes through the touchtone telephone registration system. This system is available during the following times: Monday-Thursday: 6:00 am-11:00 pm; Friday: 6:00 am-9:00 pm.

To Access the System, Dial (978) 934-2050/ (978) 934-2049

The Voice Response System will answer the call and ask if you want to access Day School (Option 1) or Evening Division (Option 3). Choose Option 3. You will now be asked for your ID # and if valid, your Continuing Studies PIN.

Hold flags will be checked and if none are found, you will be led through the Registration/Add/Drop process by a series of menus and options.

When you finish selecting your courses, you will be asked to pay by credit card and told the amount owed. Registration will be completed upon payment.

If you hang up anytime during the call or do not complete the payment process, all of the ADD transactions will be undone.

If you experience any problems with this system, please report them to (978) 934-2588.

Walk-In Registration at the Office of Enrollment Services/Continuing Studies, Southwick Hall, North Campus

Please refer to the Office of Enrollment Services/ Continuing Studies and Corporate Education hours for walk-in registration. Payment must be made at the time of registration. Payment after 4:00 pm must be made by check, money order, VISA, MasterCard, or Discover. Students will receive class confirmation, room assignment, receipt, and ID at the time they register.

Late Registration — See page 18 for late registration dates

Note: There is an additional \$50.00 (non-refundable) fee for late registration.

Final Drop/Add Period

See the appropriate academic calendar. Drop/adds can be processed in the Office of Enrollment Service/Continuing Studies, Southwick Hall, North Campus.

Last Week to Withdraw with "W" Notation

See the appropriate academic calendar for the last day to withdraw. Students withdrawing from any class must officially notify the Office of Enrollment Services on forms provided by the Office. Verbal messages to faculty or staff do not constitute official notification.

Identification Card

Students registering in person will receive an ID card during the office walk-in registration and general registration. Students who register by phone or mail will receive their ID by return mail with their enrollment confirmation.

Students with Disabilities

A student with a disability who needs special arrangements should contact Susan Desmond at (978) 934-2465 early in the registration process. Special advising, registration assistance, preferential scheduling, and alternative examination procedures are available. Students must qualify for handicapped parking stickers. Special parking is also available on a temporary basis.

Bookstore Locations

North Campus — Falmouth First Floor, (978) 934-2623 South Campus — McGauvran Student Union Building, (978) 934-6908

Please call the bookstore to confirm the location of your textbook.

Financial Information

Tuition is priced on the basis of credit hour unless contact hour is different. Tuition is then based on the listed contact hour,

Tuition and Fee Information

Undergraduate Tuition \$180.00 (per credit/contact hour) \$180.00 Undergraduate Audit (per credit/contact hour) High-Tech and Specialized Courses \$185.00 (includes undergraduate courses offered on the UML campus that are listed under Computer Science and Information Technology) High-Tech and Specialized Courses Audit \$185.00 Off-Campus (per credit/contact hour) \$205.00 CyberEd/Distance Learning Courses \$205.00 (per credit/contact hour) CyberEd/Distance Learning Courses Audit \$205.00 (per credit/contact hour)

Late Registration Fee (non-refundable) \$50.00 Students who have checks returned due to insufficient funda will be abarged an additional \$20.00 for

\$225.00

Graduate tuition (per credit/contact hour)

cient funds will be charged an additional \$30.00 for the processing of the registration.

Overdue Accounts

Students will be permitted to attend class and to utilize facilities only after they have cleared all their financial obligations to the University. In addition, student transcripts and diplomas will not be released unless all indebtedness has been discharged. Should it be necessary to utilize the services of a collection agency or attorney for an overdue student account, the student will be liable for any and all legal fees, commissions, and associated service charges.

Directed Studies

Directed Studies and Practicums are considered Special Programs, and as such, tuition remission and certificates of eligibility cannot be accepted.

Veterans' Information

Veterans must be matriculated in an undergraduate degree program and have all appropriate paperwork on file in the Office of Enrollment Services/Continuing Studies, including a DD214, an Admission Application form, and official transcripts from other colleges in order to receive VA benefits. Waivers for legal Massachusetts residents (residency must be documented) cover 100% cost of tuition, are not retroactive and do not cover registration and other fees. Veterans requesting benefits must check the appropriate line on the registration form. Veterans should use the mail-in or walk-in options when registering and should provide all necessary documentation (no phone-in or fax information). For additional information, call (978) 934-2430.

Third-Party Payment

All students using company direct payment, military plans, state tuition waivers, or veterans' waivers must include the appropriate forms or authorizing letters with their registration, or have them on file. No tuition refund is awarded for late submission of eligibility form. Students receiving company reimbursement must prepay their own tuition. For additional information, call (978) 934-2479.

Senior Citizens

Senior citizens (60 years or older) who are Massachusetts residents may attend classes in Continuing Studies credit programs tuition-free provided that there are sufficient tuition-paying students enrolled to bear the cost of instruction and provided there is space available. Please note that waivers are not retroactive and do not cover registration and other fees. Proof of birthdate must be provided at the time of registration. Also, proof of Massachusetts residency must be provided. Please call (978) 934-2588 for additional information.

Registration Information

Tuition Refund Policy for Credit Courses

Any eligibility for tuition refund is based on the academic calendar, not class attendance, and is pro-rated as follows, excluding fees:

Summer I (and 14-week courses, excluding CyberEd)

Withdrawal on or before May 8	100%
Withdrawal from May 9 to before	90%
the first class meeting	# 5 t 2 mg
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

Summer II

Withdrawal on or before June 27	100%
Withdrawal from June 28 to before	90%
the first class meeting	
Before the second class meeting	80%
Before the third class meeting	40%
After third class meeting	No refund

Tuition Refund Policy for CyberEd Courses

All fees will be refunded if Continuing Studies is responsible for cancellations.

Students withdrawing from any class must officially notify the Office of Enrollment Services/Continuing Studies and Corporate Education on forms provided by the Office. Verbal messages to faculty or staff do not constitute official notification.

Tuition Refund Policy for Students Receiving Title IV Financial Aid and Enrolled in a Degree or Specifically Designated Certificate Program

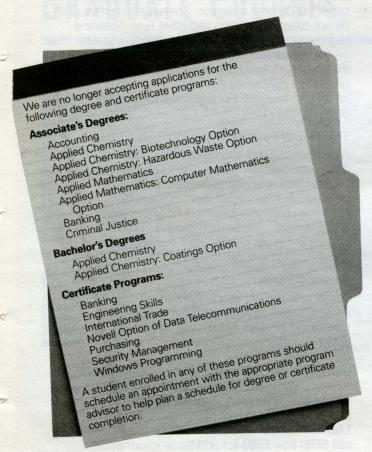
Refunds for Title IV financial aid recipients will be processed according to federal guidelines and institutional policy. Please call the Financial Aid Office at (978) 934-4220 if you have any questions.

Tuition Refund Policy for Noncredit Courses

Participants who withdraw before the first class meeting will receive the total amount paid. Participants who withdraw following the first class meeting will receive a 40% refund. No refunds are given for withdrawal after the second class meeting.

Student Health Insurance

Every student who is enrolled in at least 9 semester hours or more in a degree program is required by Massachusetts state legislation to participate in a qualifying student health insurance program. The cost of this insurance is \$339.00 beginning Spring 2000 until August 2000. Payment of the appropriate fee will be required at registration. To waive participation in this program, students must fill out a form at registration showing equivalent coverage. The name of your insurance company and your policy number are required information on the waiver form.





Michael Cummings, manager of Systems Engineering at Allenbrook Inc., in Lowell, MA teaches in UMass Lowell's Client Server Certificate Program. Winner of the William E. Haskell Jr. Memorial Award for distinguished teaching, Mike will be teaching the Oracle Architecture and Administration course this summer. (See page 11.)

Academic Calendar and Registration Information

UML

Summer Session I

May 22-June 30, 2000

Day classes begin on Monday, May 22.

M/W Evening classes begin on Monday, May 22 and include 3 FRIDAYS: June 2, June 16, and June 30 at the regularly scheduled hours.

T/Th Evening classes begin on Tuesday, May 23 and include 2 FRIDAYS: June 9 and June 23 at the regularly scheduled hours.

We encourage you to mail-in, phone-in, or faxin your registration to guarantee the class of your choice and the receipt of your classroom confirmation.

May 29: Memorial Day observed

Mail-In Registration:	April 10 to May 16
Phone-In Registration:	April 10 to May 16
Fax-In Registration:	April 10 to May 16
Walk-In Registration:	April 10 to May 16

General Registration and Open House: May 15

Late Registration: Begins May 17
There is an additional \$50.00 (non-refundable)
fee for late registration.

Last Day to Add a Lab

Day Classes: May 24

Last Day for Partial Refund

(Before the 3rd class meeting) Day Classes: May 24 M/W Evening Classes: May 31 T/Th Evening Classes: May 30

Last Day to Drop/Add Course

Day Classes: May 25 (3-credit courses); May 26 (4-credit courses) M/W Evening Classes: May 31 (Before the 3rd class meeting) T/Th Evening Classes: May 30 (Before the 3rd class meeting) CyberEd (Through June 9)

Last Day to Withdraw With "W" Notation

Day Classes: June 14 for a 3-credit course
June 9 for a 4-credit course
M/W Evening Classes: June 19
(Before the 10th class meeting)
T/Th Evening Classes: June 20
(Before the 10th class meeting)
CyberEd (Through July 28)

Final Examinations

Day Classes: June 28 for a 3-credit course June 29 for a 4-credit course M/W Evening Classes: Friday, June 30 T/Th Evening Classes: Thursday, June 29

NOTE: M/W evening courses meet twice a week plus 3 Fridays: June 2, June 16, and June 30. T/Th evening courses meet twice a week plus 2 Fridays: June 9 and June 23.

Summer Session II

July 10-August 17, 2000

Day Classes begin on July 10.

M/W Evening Classes begin on July 10 and include 2 FRIDAYS: July 14 and July 28 at the regularly scheduled hours.

T/Th Evening classes begin on July 11 and include 2 FRIDAYS: July 21 and August 4 at the regularly scheduled hours.

We encourage you to mail-in, phone-in, or faxin your registration to guarantee the class of your choice and the receipt of your classroom confirmation.

July 4: Independence Day observed

Mail-In Registration:	April 10 to June 30
Phone-In Registration:	April 10 to June 30
Fax-In Registration:	April 10 to June 30
Walk-In Registration:	April 10 to June 30

Late Registration: Begins July 3
There is an additional \$50.00 (non-refundable) fee for late registration.

Last Day to Add a Lab

Day Classes: July 12

Last Day for Partial Refund

(Before the 3rd class meeting)
Day Classes: July 12
M/W Evening Classes: July 10
T/Th Evening Classes: July 11

Last Day to Drop/Add Course

Day Classes: July 13
(Before the 4th class meeting)
M/W Evening Classes: July 14
(Before the 3rd class meeting)
T/Th Evening Classes: July 18
(Before the 3rd class meeting)
CyberEd (Through June 9)

Last Day to Withdraw with "W" Notation

Day Classes: August 2 for a 3-credit course July 27 for a 4-credit course (Before the 10th class meeting) M/W Evening Classes: August 2

(Before the 10th class meeting)
T/Th Evening Classes: August 4
(Before the 10th class meeting)
CyberEd (Through July 28)

Final Examinations

Day Classes: August 15 for a 3-credit course August 16 for a 4-credit course M/W Evening Classes: Wed, August 16 at 7 pm T/Th Evening Classes: Thurs, August 17 at 7 pm

Note: M/W evening courses meet twice a week plus 2 Fridays: July 14 and July 28. T/Th evening courses meet twice a week plus 2 Fridays: July 21 and August 4.

Check Out Our New World Wide Web Site!

Continuing Education information can also be retrieved over the World Wide Web. Look for us at http://continuinged.uml.edu for additional information on current course schedules, course descriptions, degree or certificate program information and much more!



Academic Information



The University of Massachusetts Lowell is accredited by the New England Association of Schools and Colleges, which accredits schools and colleges in the six New England states. Membership in the association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators. The programs in Civil Engineering Technology, Electronic Engineering Technology, and Mechanical Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology. The Bachelor of Science in Business Administration (BSBA) is accredited by the AACSB — The International Association of Management Education.

Catalog

Students should refer to the Continuing Studies catalog for rules, regulations, program outlines, and course descriptions. The catalog is available in the Advising Center and the Office of Enrollment Services/Continuing Studies and at http://continuinged.uml.edu on the World Wide Web.

Admission into a Certificate or Degree Program

Students who have graduated from high school or who have earned a high school equivalency certificate are invited to apply for programs leading to a Certificate or an Associate or Baccalaureate degree. Applications for all programs are accepted on a rolling admissions basis. Contact the Continuing Studies Office at (978) 934-2470 (certificate programs) or (978) 934-2474 (degree programs) for an application and information on the application procedure. There is no fee to apply.

The following degree and certificate programs are available on a part-time evening basis:

College of Engineering **Associate's Degrees**

Civil Engineering Technology Civil Engineering Technology: Water Treatment Option

Civil Engineering Technology: Wastewater Treatment Option

Civil Engineering Technology: Surveying Option Electronic Engineering Technology Mechanical Engineering Technology

Bachelor's Degrees

Civil Engineering Technology Civil Engineering Technology: Environmental Option

Electronic Engineering Technology Mechanical Engineering Technology Mechanical Engineering Technology: Manufacturing Option Mechanical Engineering Technology:

College of Arts and Sciences Associate's Degree

Information Systems

Plastics Option

Bachelor's Degrees

Applied Mathematics Applied Mathematics: Computer Mathematics Criminal Justice Criminal Justice: Paralegal Option

Information Systems Liberal Arts

College of Management

Associate's Degree Management

B.S. in Business Administration

Certificate Programs

Accounting Client/Server Technology Community Policing Computer-Assisted Manufacturing Computer Engineering Technology Pre-Master's Certificate in Computer Science Data/Telecommunications **Electronics Technology Electro-Optics Environmental Technology**

Fundamentals of Information Technology Graphic Design and Digital Imaging Hazardous Waste Management Interactive Game Design Intranet Development Land Surveying Manufacturing Technology Multimedia Applications Nutrition Paralegal Studies Plastics Engineering Technology and Plastics Engineering Technology with Packaging Quality Assurance Semiconductor Manufacturing Spanish **Technical Writing** UNIX Wastewater Treatment

Certificate Completion

Water Treatment

When a student completes the necessary courses for a certificate program, the student should complete and submit a Certificate Award Petition to Continuing Studies.

Website Design and Development

Course Grades

Grade Reports: Grade reports for the Summer session will be mailed to students approximately two weeks after exams end. Students who have received their PIN can also call the Voice Response System at (978) 934-2050 to receive their Summer grades, which will be available as soon as they are posted.

Drop-in Advising Center

Students are welcome to drop by the Advising Center, located in Southwick Hall, Room 225, from 8:30 am to 5:00 pm for general advising, information on associate's and bachelor's degrees and certificate programs, and/or to obtain catalogs and brochures. Call (978) 934-2474 for information.

Appointments with Program Coordinators and General Advisors

In addition to the advising conducted at the Advising Center, appointments with Advisors and Program Coordinators are being scheduled also. Students are encouraged to call the Advising Center at (978) 934-2474. Evening supervisors are also available from 5:00-8:00 pm to answer questions and conduct status reviews.

Evening Supervisors

Professor Alan Doerr Professor Bernard Shapiro

Faculty Advisors

Professor Paul Damour: Chemistry, Biology, Environmental Science, Physics

Professor Alan Doerr: Applied Mathematics

Professor Stephen Driscoll: Plastics and Engineering Technology and Plastics Engineering Technology with Packaging Option

Professor Ann Marie Hurley: Computer Math, Information Systems

Professor Joseph Lipchitz: Liberal Arts, Criminal Justice, Paralegal Studies

Professor Donald Pottle: Chair of Engineering Technology

Professor Charles Thompson: Accounting and Management

Professor Robert Tuholski: Mechanical Engineering Technology

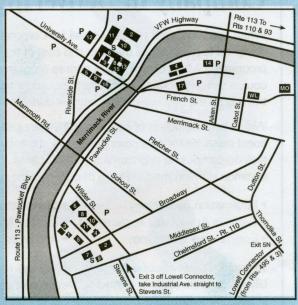
Professor Fahd Wakim: Electronic Engineering Technology

General Advisors

Ms. Elaine Bourret: Accounting and Management Ms. Susan Desmond: Degree and Certificate

Ms. Joyce Roy: Degree and Certificate Programs Ms. Brenda Woonton: Degree and Certificate

Campus Information



North South Allen Hall BL Ball Engineering Ctr. CO Coburn Costello Gym Cumnock Hall Concordia Hall Dormitories Dining Hall Eames Hall DU Dugan Hall EB Engineering DR Durgin Hall FA Falmouth MA Mahoney Hall KI Kitson OL O'Leary Library Power Plant Alumni/Lydon 10 Student Union Library 10 EC Pinanski 11 WE Weed Hall 11 OH Olney Parking 12 OS Olsen Security 13 PA Pasteur

> <u>Downtown</u> MO Mogan Center WL Wannalancit

Directions

Research

15 SO Southwick Hall

Parking

Security

Foundation

Smith Hall

Fox Student Union

3

4

5

6

7

8

9

14

16

17 P

S

For directions to the University, call (978) 934-5800.

Parking

Students are encouraged to park in the numerous parking lots on the North and South Campus. Parking stickers may be obtained from the University Police in Ball 125 North Campus (open 24 hours a day, 7 days a week). This sticker entitles students to park after 5:30 pm in any University parking lot except Cumnock Hall. Students and faculty should not compromise public safety by blocking access of fire lanes, ambulance and emergency vehicles. Nor should students and faculty park in handicapped spaces. Students and faculty will be towed and/or ticketed for violations. In addition, students and faculty will be towed by the Lowell police if they park in "Residential Parking" areas.

Locating Your Classroom

Upon registration, students are issued a confirmation printout which includes the two-letter building code along with the room number. Refer to the map and building key above to locate where your class will be held. For assistance, call the Advising Center at

This newspaper is printed at no cost to the Commonwealth of Massachusetts The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action University and does not discriminate in employment or access to programs or services on the basis of race, sex, sexual orientation, color, national origin, religion, handicap, or veteran's status and is in compliance with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, and the Americans With Disabilities Act, 1990. Any inquiries and/or grievances may be referred to the Affirmative Action Officer, the Title IX Coordinator, the Disabilities Coordinator and/or to the Director, Office for Civil Rights, U.S. Department of Health and Human Services, Washington, D.C.

Every effort has been made to ensure the accuracy of the information pre sented in this bulletin. However, Continuing Studies and Corporate Education reserves the right to implement new rules and regulations and to make changes of any nature in its program, calendar, locations, tuition, and fees. Whenever possible, appropriate notice of such changes will be given before they become effective

In registering for courses, each student assumes full responsibility for knowledge of and compliance with the definitions, regulations, and procedures for the University as set forth in the appropriate publications and bulletins.

CORPORATE EDUCATION

Corporate Training Programs

WHAT YOUR FUTURE DEMANDS

Let Our Corporate Training Team Assist Your Company in Delivering Quality Training!

When you work with UMass Lowell for Corporate Training, you'll receive customized training solutions designed to help reduce the time and cost of training. In addition to individual courses and certificate programs, UMass Lowell offers degree programs at all levels through the doctorate. Our flexible course delivery options allow you to schedule training around your workload. We provide customized training by the day, week, or month — during or after working hours or via distance learning.

With a large selection of courses and expert instructors, UMass Lowell serves as an important educational resource for area companies. We currently provide training to employees at over 1,400 companies on-campus, at approximately 50 off-campus locations, and through a range of distance learning media. Some of our specialty areas include:

Manufacturing Technology

- Information Technology
- Creative Arts/Media Applications
 Plastics Manufacturing
- Engineering Technology
- And many more!

To find out more about putting the knowledge resources of UMass to work for your company, please visit our Website at http://continuinged.uml.edu or call (978) 934-2144



University of Massachusetts Lowell

Continuing Studies and Corporate Education One University Avenue, Lowell, MA 01854



Interested in onsite corporate training in manufacturing and engineering? UMass Lowell has 11 training modules that can be customized to meet your corporate training needs:

- Geometric Tolerancing
- Control Systems
- XY Mechanical Movements
- Machine Control Module

Joanne_Talty@uml.edu-

- Introduction to Pumps & Vacuum Systems
- Shop Math

For further information, contact Joanne Talty at (978) 934-2144 or email:

Statistical Process Control

- Introduction to Engineering Drawing
- Computer Fundamentals
- Basic Fluid Power
- Measuring and Gaging

Interested in Teaching?

UMass Lowell is looking for part-time intructors in the areas of Information Technology & Creative Arts/Media!

The University of Massachusetts Lowell Continuing Studies and Corporate Education program is looking for experienced instructors to teach part-time evening courses and/or CyberEd Web-based courses. We are looking for instructors with knowledge in any of the following areas:

Website Design & Graphics Website Development **Intranet Development** HTML, FrontPage, Dreamweaver Java/JavaScript

Active Server Pages SQL Database Administration Information Technology Visual Basic C++ Programming Visual C++ Client/Server Programming **Relational Databases**

Oracle LAN/WAN TCP/IP **UNIX Administration** Macromedia Director Shockwave and Flash! **Graphic Design** 3D Imaging & Animation Interactive Game Design Multimedia & Desktop Video E-Commerce & Web-Based Marketing **Network Management**

PowerBuilder

Engineering: Elements of Thermodynamics and Heat Transfer

Master's in the appropriate field is required. Doctorate and college teaching preferred.

To apply, email your resume and the names of three references to: Catherine_Kendrick@uml.edu or mail to: UMass Lowell Continuing Studies & Corporate Education, Attn: Catherine Kendrick, One University Ave., Lowell, MA 01854. Positions are contingent upon funding. UMass Lowell is an Equal Opportunity/Affirmative Action, Title IX, H/V, ADA 1990 employer.



Registration Form for Credit and Noncredit Courses

Note: Please remember to fill in your work, home phone numbers and email address. This will allow us to reach you in case of class cancellations.

University of Massachusetts Lowell

Continuing Studies and Corporate Education (978) 934-2480 One University Avenue, Lowell, MA 01854

PLEASE USE INK AND PRINT

CHECK APPROPRIATE REGISTRATION STATUS:

☐ Summer I (May 22–June 30) ☐ Summer II (July 10–August 17) □ Noncredit/Professional Institutes □ Graduate Social Security No._

Street & No._

City & State_ _ Zip Code _ Sex: M F Date of Birth _ Work phone Home phone Company Name. Street Address City & State _ Handicap? ☐ yes ☐ no JTPA? _ Change of name or address since last registration? \square yes \square no Will you be using veteran benefits? ☐ yes ☐ no State/Active Duty _____ G.I. Bill _

COURSES FOR WHICH YOU ARE REGISTERING Course Title Credits SUMMFR I

COMPLETE IF PAYING BY CREDIT CARD ☐ VISA **Account Number Expiration Date**. Customer Signature

Tuition and Fees*		
Tuition		
Late Fee	201	
Save \$50 Late Fee -		
Register Early)		

*Note: If you are registering for both credit and noncredit courses, please photocopy the registration form and register for them separately. Payment for credit and noncredit courses should also be made separately.